

**THE ELUSIVE NATURE OF EDUCATIONAL CHANGE**  
**A CASE STUDY ANALYSIS OF**  
**THE PARKVIEW SECONDARY SCHOOL L.E.I.F. PROGRAM**

by

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**THESIS SUBMITTED IN PARTIAL FULFILLMENT OF**  
**THE REQUIREMENTS FOR THE DEGREE OF**  
**MASTER OF ARTS**  
**in the Faculty**  
**of**  
**EDUCATION**

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**SIMON FRASER UNIVERSITY**

**March 1994**

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**Parkview Secondary School L.E.I.F. Program**

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## ABSTRACT

The Elusive Nature of Educational Change is a case study of a discontinued program that was a developmental site for the "Year 2000" reforms in British Columbia--the Parkview Secondary School L.E.I.F. Program (Learning Environment that is Integrated and Flexible). Implemented by a voluntary team of five educators to approximately ninety grade eight students, the program includes the integration of subject matter, a flexible timetable in a "school within a school" structure, and individualized learning with a focus on mastery contained within a non-traditional facility.

The purpose of the study is to explore the concepts of (1) clarity of innovative doctrine, (2) motives for adoption and extent of planning, (3) personal fit, (4) organizational fit, (5) role of leadership, (6) impact of innovative strategies, and (7) the unanticipated outcomes of change to arrive at a set of recommendations for the implementation of similar educational innovations.

The main bodies of literature used in the initial conceptualization of this study include Smith and Keith's (1971) Anatomy of Educational Innovation; Fullan's (1991) The New Meaning of Educational Change; and Huberman and Miles' (1984) Innovation Up Close: How School Improvement Works. Numerous additional references are cited on the topic of educational change.

The data are collected from two sources: (1) an existing data base including program documents, and a survey of staff, students and parents and (2) a new data base that includes interviews with members of the team and two administrators and the researcher's log of daily observations as "participant as observer."

Findings from the case study underscore the negative impact of values conflicts, doctrinal inconsistencies and lack of clarity in innovative attempts; importance of adequate planning; significance of individual motives for embracing change and the risks associated with true belief; the problems of large scale, complex change; lack of knowledge utilization during implementation; the impact of weak structural, cultural and constituent linkages; the importance of leader commitment, support and feedback during implementation; unanticipated difficulties associated with innovative teaching strategies; and the problem of program blunting and facade. The study concludes with a set of recommendations.

## **DEDICATION**

This work is dedicated to the L.E.I.F. team (including Kelly who, after months of planning, was unable to participate). Their commitment to students and their profession is inspirational and it has been a privilege to have shared this experience with them.

## ACKNOWLEDGEMENTS

Special acknowledgement goes to Dr. Michael Manley-Casimir for his valued comments and assistance with this study and to Dr. Norman Robinson for introducing me to the Smith and Keith (1971) book that formed the initial conceptualization for this study.

I am also grateful to the L.E.I.F. team of teachers who made this study possible. They so willingly gave their time, even after an exhausting year of implementation, illustrating their tremendous sense of professional commitment.

Last, but not least, I acknowledge my husband and "Editor-in-Chief," Randy, whose support and encouragement kept me going. And to my darling son, Andrew, who offered his own words of encouragement and seemed to understand when Mom had to study--again. Thank you.

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## **PREFACE**

It takes a tremendous amount of courage to embrace change; and even more courage to write about it honestly.

## **CHAPTER ONE**

### **BACKGROUND AND STATEMENT OF THE PROBLEM**

#### **Rationale**

Educational change has interested educators and researchers for decades, yet despite all the attention, true educational reform rarely happens. Voluminous documents record the complexity of change underscoring that real change does not come easily (Fullan, 1991; Huberman & Miles, 1984). Perhaps this is why very little change is effected and we find ourselves "reforming again, again and again" (Cuban, 1990).

Yet despite all this, policy-makers and educators alike continue to mandate and implement desired, yet largely unsuccessful, reforms. In recent years this is partly because of the sincere desire to have our education system keep pace with shifts in our society from the "industrial era" to the "information age" and partly because of pressure from the community that is alarmed at drop-out rates and the skill level of graduates (Royal Commission on Education, 1988). Why innovations fail, even though the attempts are sincere, is the subject of this thesis.

One broad example of an attempt at educational reform can be found in the recent "Year 2000" initiatives in British Columbia. The reform process began in 1988 with the provincial government's Royal Commission on

Education culminating in a document entitled, A Legacy for Learners: The Report of the Royal Commission on Education, 1988. This document outlines the current economic and social realities in British Columbia that place new expectations and demands on our school system. Current economic realities include growth in the service sector at the expense of the resource sector; improved technology that is rapidly changing the traditional workplace; and the increased number of women in the workplace. In the social context, the Commission identified British Columbia's diverse cultural heritage and the transformation of the family to a "more fragile institution" (p. 12) as some of the factors resulting in the expectation that schools assume more social responsibilities.

The report contains eighty-three recommendations including a strand approach to the curriculum (Science, Practical Arts, Fine Arts and Humanities) with locally developed courses forming approximately twenty percent of the curriculum, and the recommendation that teachers use an interdisciplinary approach and developmentally appropriate learning experiences.

The Ministry of Education's response to the Royal Commission on Education (1988) was to produce two papers, Mandate for the School System and Policy Directions that, along with a new School Act, were brought to the Legislative Assembly in 1989 and eventually formed the basis of a draft policy paper entitled Year 2000: A Curriculum and Assessment Framework for the

Future (1989). Three programs were set out: Primary, Intermediate and Graduation. As the Royal Commission recommended, subjects would be organized around strands and an interdisciplinary, continuous progress approach would be encouraged, especially in the Primary and Intermediate programs. The Graduation program would include work experience, and while provincial exams would remain, students could "challenge" certain units of a course for credit. The principles of the document include the "active participation" of the learner, the recognition that learning should be "learner-focussed" and both an individual and social process, and that assessment should be based on "authentic evidence." The goals of each program place equal emphasis on the affective domain. (See Appendix A for a summary of the "Year 2000".) Educators and the public alike were encouraged to respond to this draft document and successive drafts were created. An implementation timeline was established by the province (and modified periodically) while educators in the field were encouraged to pilot elements of the new programs through grants for "Developmental Sites." The case study to be closely examined in this thesis is an "Intermediate Program Developmental Site."

The Parkview Secondary School L.E.I.F. Program (Learning Environment that is Integrated and Flexible) was an attempt to address professional need for change and, at the same time, respond to the "Year 2000 Intermediate Program." In 1991, the program proposal was accepted by the

Ministry of Education, making this project one of several "Intermediate Program Developmental Sites" found throughout the province to pilot the implementation of mandated change, and, after two years of planning, a team of five educators implemented the program in September, 1992. It is significant that while the content of the program was scrutinized by the Ministry before the proposal was accepted, the process of implementation was left entirely to the team with no direction whatsoever from either the Ministry or District.

### **Statement of the Problem**

While nearing the end of the first year of implementation it became apparent that the Parkview Secondary School L.E.I.F. Program faced many difficult challenges and that its future was threatened despite the tremendous effort put forward by the team of teachers. The team encountered many problems associated with both the process and content of change and, even though they had a sincere commitment to the program, the team was unable to secure program continuance.

This is by no means, however, the first time serious attempts at educational innovation have faced grave difficulty. A case in point is a study done by Smith and Keith highlighting the failure of an innovative attempt at Kensington Elementary School in 1971. One cannot help but be struck by several features of this study that illustrate (1) the amazing similarities between

the kinds of reforms attempted in 1971 and the kinds of reforms inherent in the current "Year 2000" documents and (2) the relevance to today of Smith and Keith's account as to why that innovative effort failed since there is a striking resemblance between their case study and the Parkview Secondary School L.E.I.F. Program. It would appear that more attention should be paid to case studies as useful instruments to piece together effective models for change and that we have not done a very good job thus far of learning from past experience. No doubt the team would have approached the L.E.I.F. Program situation differently had the team known about the Smith and Keith (1971) study prior to implementation. This underscores the importance of thorough research before innovations are initiated.

The Smith and Keith (1971) case study outlined in the book Anatomy of Educational Innovation and a following trilogy of books, Educational Innovators: Then and Now (Smith, Kleine, Prunty, & Dwyer, 1986); The Fate of An Innovative School: The History and Present Status of the Kensington School (Smith et al., 1987); and Innovation and Change Schooling: History, Politics, and Agency (Smith et al., 1988) along with the Parkview Secondary School case study experience, led to the following guiding questions forming the initial conceptualization for this study:

1. To what extent does clarity, and understanding of the doctrine guiding innovations influence the success of implementation? (Fullan, 1991; Smith & Keith, 1971)

2. Do the motives for adopting innovations have an influence on the success of implementation? What impact does the planning stage have on implementation?
3. What role does "personal fit" of the innovation (Huberman & Miles, 1984) play in adoption and implementation?
4. Where pervasive change exists, what systems linkages are required to support the implementation process? To what extent does "organizational fit" (Huberman & Miles, 1984) and systems linkages impact the continuance of innovations? What role does the cultural context of an organization play in implementation? Of what significance is the fit of the innovation with the constituents of change?
5. What unanticipated consequences and unintended outcomes (Smith & Keith, 1971) can emerge from innovative instructional strategies? What are the effects of these on implementation?
6. What accounts for the discrepancy between intended outcomes and the real change effected?
7. What role does leadership play in the adoption, implementation and continuance of innovations?

The purpose of this thesis is to (1) closely examine the Parkview Secondary School case study to investigate these guiding questions and any new conceptualizations emerging from the data and literature and, (2) define a set of recommendations for the implementation of educational innovation drawing upon the experience of this case study and related literature.

### **Overview of the Method**

The case investigated is the Parkview Secondary School L.E.I.F. Program (Learning Environment that is Integrated and Flexible). It is a program involving approximately ninety students and a team of five educators



who deliver an integrated curriculum through a team approach. Scheduling of learning experiences is flexible due to a "school within a school" structure (a more complete description follows in Chapter 3--"Method"). The case is examined through two data bases:

- I. **Existing data base** established at the school level for the purpose of program evaluation consisting of:
  - A. **Quantitative data** in the form of overall achievement results, attendance, drop-in and drop-out data.
  - B. **Qualitative data** in the form of a list of educational experiences such as field trips, guest speakers and integration activities; summary of mastery learning procedures; use of tutorial time; behaviour management strategies; electives offered; a description of the composition of classes in the program; documents articulating program goals and intent prior to implementation; and documents outlining the progress of the developmental site.
  - C. **Perception data** collected through a "horizontal" survey administered to students, parents and teachers involved with the program based on the five dimensions outlined in the British Columbia Primary--Intermediate Accreditation Guide (1990): Learning Experiences; Leadership; Professional Attributes and Staff Development; School (Program) Culture; and School and Community. Specific criterion statements within each category relate to program goals articulated prior to implementation in the Spring of 1992.
 

Newspaper, magazine and newsletter articles related to the "Year 2000."
  
- II. **New data base** collected specifically for this study in the form of:

- A. **Interviews** with members of the team involved in this program.
- B. **Interviews** with two administrators who were instrumental in the implementation of the program.
- C. **A log** recorded daily by the researcher throughout implementation identifying the most salient aspects of each day.
- D. **Pre-implementation notes** and an **interview** with one member of the team the summer prior to implementation.

The data results are examined through the conceptualization inspired by Smith and Keith (1971), Huberman and Miles (1984) and Fullan (1991) and articulated through the guiding questions in this study. These results are then compared to relevant literature on educational change to form a set of implementation recommendations.

### **Limitations of the Thesis**

The relationship the investigator has with those being investigated can have impact on the findings (Hammersley & Atkinson, 1983; Merriam, 1988). The role adopted in the Parkview case is that of "participant as observer" since the investigator was a member of the team of educators that implemented the program. It should be noted that while the research activity was known to the other team members, it was secondary to the investigator's participation in the program. Program implementation was so demanding that there were many times when the research component was a distant second place to the implementation requirements of the program, making the participation seem

"complete" at times. As a result, the central question remains: to what extent does this particularly close relationship to the informants affect the investigation?

Hammersley and Atkinson (1983) point out that participation creates difficulty for the investigator since "the research activity will be hedged round by these pre-existing social routines and realities. It will prove hard for the field-worker to arrange his or her actions in order to optimize data collection possibilities" (p. 94). In addition, participation on the scale experienced in the Parkview case makes the investigator susceptible to "going native" (p. 98). "Not only may the task of analysis be abandoned in favour of the joys of participation, but even where it is retained bias may arise from 'over-rapport'" (p. 98).

The acknowledged biases which this investigator brings to the investigation stem from enthusiasm for the program. There was a great deal of ownership in it and a desire to see it succeed. Difficulties that were faced were not merely observed but deeply experienced. This close association is beneficial when it comes to underscoring the complexity of change and its personal impact on educators. The challenge, however, is in supplementing this first-hand account with interviews and document analysis to provide a more "holistic interpretation" of the experience (Merriam, 1988). As Hammersley and Atkinson (1983) aptly point out, "Rather than seeking, by

one means or another, to eliminate reactivity, its effects should be monitored and, as far as possible, brought under control" (p. 104). The critical first step in doing this lies in recognizing the increased subjectivity that participation can bring.

### **Definition of Key Terms**

Smith and Keith (1971) made the observation that teachers may use the same terms but have different meanings for them. It is appropriate, therefore, to define some of the key terms to promote clarity:

**Doctrine**--"the complex combinations of a point of view which is visionary, that is, highly conscious, and that is highly codified . . . (it) includes an elaborate system of concepts, spelling out the entire structure of means and ends within an organization" (Smith & Keith, 1971, p. 21).

**Adoption of an innovation**--includes factors such as pressure to adopt, motives for adoption (Huberman & Miles, 1984) and the relevance of the innovation to the teachers who implement, the readiness of the teachers to initiate the innovation and the resources required to adequately implement the innovation (Fullan, 1991).

**Personal fit**--relates to how well the innovation fits the individual user. Goodness of personal fit would be associated with an innovation that consists of congenial ways of relating to pupils; and also whether or not the innovation meets philosophical need, that is, it sounds like what the innovator believes in (Huberman & Miles, 1984).

**Organizational fit**--relates to the "demandingness of innovation on the school or school district in relation to the resilience or institutional slack available to meet the demands" (Huberman & Miles, 1984, p. 68). Included are the structural and cultural linkages (Corbett & Wilson, 1983) of the innovation with the permanent system and linkages with the constituents of change; namely, students, parents and the community.

## **Organization of the Thesis**

Chapter two reviews the literature as it pertains to the theory and practice of implementing educational change. Chapter three details the research design and method of the Parkview Secondary School case study. Chapter four presents the findings of the study, while chapter five provides a summary of the findings, their implications and the resulting set of recommendations.

## **CHAPTER TWO**

### **A REVIEW OF RELATED LITERATURE**

#### **Broad Perspectives on Educational Change**

In reviewing the literature on educational change, one cannot help but be overwhelmed by the sheer volume of materials written on the subject. This leads to two observations: (1) that educational change has been a subject for researchers for some time and (2) it must indeed be a complex process to have inspired so many thoughtful accounts.

If one examines the literature from the past few decades, one finds three broad perspectives on educational change: a technical, political and cultural view (Corbett & Rossman, 1989; House, 1981; LaRocque, 1986). The technical or "rational" approach to educational change suggests that policy makers "have both the knowledge and the technical expertise within their grasp to solve problems just like surgeons doing heart bypass operations" (Cuban, 1990). In this approach, educators are the consumers of policies on educational change (Wideen, in press) and these policies can be effectively implemented provided they are "teacher-proofed" and "de-bugged." Guba and Clark's (1965) "research, development, diffusion and adoption" model of change embraces a technical view of change. Recently, researchers are very critical of such models of change. House, Kerins, and Steele (1972) put it

succinctly when they say, "Research and Development models of change assume a passive user population which is shaped by the dissemination process itself. The facts belie this assumption" (p. 12). LaRocque (1986) points out that "classical or technological models" assume that there is a common values framework and that the policy is in the common interest. In the technical view of educational change, the policy makers are the critical element for effecting change.

A second perspective on educational change recognizes a political component where policy implementers have "their own goals and values and interests which may differ from, and even be in conflict with, those of policy makers" (LaRocque, 1986, p. 18). In this case, cooperation cannot be assumed and often must be negotiated. Environmental context is the critical element in the political perspective of change.

Finally, the cultural perspective recognizes that a common values framework does not exist; therefore, implementation strategies should focus on problem-solving, adaptation, and professional growth (LaRocque, 1986). The cultural perspective emphasizes school context as the critical element supporting or resisting change.

More recently, the literature seems to be taking on yet another perspective on educational change that emphasizes the role of the individual teacher. Wideen (in press) identifies this movement as a "paradigm in which

the teacher stands at the centre of school change" (p. 11). This paradigm has translated itself into renewed interest in "action research" and in having teachers interpret change to determine what is best for their own classrooms. In the personal perspective on change, the individual teacher is the critical element in determining the nature of the change to be effected. As Smith, Kleine, Prunty and Dwyer (1986) note:

Innovation is not just a technical problem, nor just a political problem, nor just a cultural problem, as House (1979) has argued so eloquently. In our view, innovation is also a personal problem. The wealth of perspectives, concepts, and hypotheses from personality theory have barely been tapped by us. (p. 224)

To this researcher, it has become clear that educational change is not a rational, linear process (House, 1971). In examining change efforts, one must recognize the interactive nature of change with a variety of elements: the policy makers who continue to impose their views of education on educators; the environmental context that imposes political limitations on the amount of change tolerated in the organization; the cultural context of schools that will embrace or resist change; and the individual teacher who has the ultimate veto on change since any change effort can stop at the classroom door (Coleman & LaRocque, 1990).



### **Doctrine Clarity**

More often than not it is the nature of the innovation itself that makes implementation more complex. It is important to note the social values implicit in innovative efforts, especially those values that may conflict within the proposed innovation; the conceptual clarity and crystallization on the part of the players toward the content of the innovation; and the latitude that is given for adaptations to the original plan. All of these can seriously impact the outcome of any innovative effort.

### **The Social Context of Innovative Doctrine**

Achilles (1984), in reviewing the "pendulums" in education, notes that "at times of national crisis, either internal or external in nature, education receives sudden attention and study" (p. 22). Lieberman (1977) adds:

Few people will disagree that schools are playing out the chaos and confusion in the society. There are higher prices, fewer jobs, general dissatisfaction with futures, and the school represents the one place where the public still has a chance to voice its frustration with the many things gone wrong. (p. 259)

Schools are inextricably linked to a society that cannot agree on solutions to the problems perceived in the school system. Cuban (1988b) suggests that problems and solutions in the American education system are mismatched because the problems are really "persistent dilemmas involving hard choices between conflicting values. Such choices seldom get resolved but rather get

managed; that is, compromises are struck until the dilemmas reappear" (p.

329). Cuban gives an example:

The conflicting values of excellence and equity, proxies for this culture's fundamental values of individual success and group interests, have been dealt with separately, redefined, and combined over the last century and a half to cope with the highly charged emotions and national goals connected to these values. (p. 330)

Cuban also cites core academic subjects as "a compromise to a fundamental dilemma in American schools over conflicting values of excellence and equity in providing an equal education to all children" (p. 329). Mitchell and Encarnation (1984) concur in observing the existence of "sharp tensions" between the policy goals of efficiency, equity and quality in our schools.

Huberman (1972) also notes that schools face incompatible goals:

The school has multiple and often incompatible goals. Those who would defend one innovation on the grounds that it will develop emotional development will be resisted by others who think that the school's principal function is to make children neat, obedient and prompt. (p. 46)

The literature is full of other references to the conflicting values of society being imposed on the schools (Crandall, Eiseman & Louis, 1986; Parish & Krueger, 1987; Smith & Keith, 1971).

In a later article, Cuban (1990) goes on to say:

Much pressure is placed on schools to align with public shifts in values . . . Such value differences, as they become transformed by media and political coalitions into pressure on schools to change, can seldom be removed by scientifically derived solutions . . . Values conflicts, then, are not problems to be solved by the miracles of a science of schooling; they are dilemmas that require political

negotiation and compromises among policymakers and interest groups--much like that which occurs in the larger society. There is no solution; there are only political tradeoffs. (p. 8)

For those who wish to address social pressure to change, care must be taken in identifying the problems to be addressed (Cuban, 1988b) for there may not be one easy solution. Smith, Dwyer, Prunty and Kleine (1988) caution about a "one right way" view:

One of the consequences of such a view is seeing conflict, disagreement, and debate only as a temporary instrumental problem, one which can be resolved when everyone 'understands' or 'knows the facts.' In our view, when important interests, sentiments, and values are in conflict they are not resolved so easily. (p. 291)

Educational innovations will be hard pressed to address the conflicting values in our society and thereby satisfy all the constituencies wanting change.

Another aspect of social context that impacts upon educational innovations comes from those who would mandate change. Corbett, Firestone and Rossman (1987) state:

There is a tendency from above to view schools as empty vessels that can be filled and refilled according to changing public concerns and reform agendas. This tendency rests on the assumption that schools are value-free, easily adjusted organizations. This, of course, is far from the case. Schools not only teach values but also have a value structure embedded in them. (p. 57)

As Loucks-Horsley and Roody (1990) point out, mandates clash with our image of the professional:

The word *mandate* has an unfortunate connotation for the education profession in general, as indicated by the use of the word *professionalism* synonymously with *autonomy*, and the proliferation of

the use of the word *empowerment*. The implication is that in order to be a professional, a teacher (or an administrator) must be able to make his or her own decisions, making mandates inappropriate. (p. 52)

Glickman (1989) concurs with this and goes on to say, "It is no wonder that educators feel a bit schizophrenic at this time" (p. 6).

The recent shifts in education in British Columbia reflect some of the difficulties with mandated change. In the time of this study (1992 - 1994), the provincial government has made retreats in the mandated "Year 2000" program of which this study was a part. Mandates that are changed at political whim pose a particular problem for teachers. As Wideen (in press) states:

Teachers, if they take such mandates seriously, are constantly kept off balance trying to adjust to changes required for one mandate before another one comes along, while all around them policy-makers wax eloquently about the need for teacher ownership. (p. 40)

One can, however, understand the reluctance of policy-makers to fully endorse teacher-initiated change since the products of change will not be uniform, thus perhaps defying the "equity" goal of education (Glickman, 1989). In addition, policy makers will be asked to take the same kinds of risks that they expect the educators to take; it would appear that they are reluctant to do so.

### Conceptual Clarity of the Innovation

Smith and Keith (1971), in their study of an innovative school, found the doctrine to be affective, abstract and "lofty":

We have renewed our suspicions of written accounts that seem to strive to excite the reader. Also, we have renewed our concern regarding the potential incongruencies between the doctrine in its many forms and the organizational reality lying beneath it. (p. 41)

Charters and Pellegrin (1972) cite "the fallacious assumption that a statement of general, abstract program values and objectives will easily be translated into new and appropriate behaviour patterns at work" (p. 12) as one of the "barriers to implementation." It is too difficult to attain conceptual clarity from a program that is defined in such a general way. Smith and Keith (1971) suggest that affective, general and lofty descriptions serve to excite the reader and thus may assist in acceptance of the new program since new programs often have to be "sold." Fullan (1991) cautions, however, about the risks of "oversell" and problems that arise when the program cannot deliver what it has "sold."

Another related problem to general program descriptions is the difficulty in attaining shared definitions. As Smith and Keith (1971) point out:

. . . educational discussions flounder as persons hold varying referents but utilize similar labels. Furthermore, these labels are often used injudiciously or inadvertently across situations, age levels, and contexts. Overly simple interpretations are a consequence. (p. 330)

Fullan (1991) maintains that conceptual clarity is part of a process and that "full understanding can come only after some experience with the change" (p. 128). Huberman and Miles (1984) and Coleman and LaRocque (1987a) go further to explain it is trial and error with the innovation that promotes clarity.

The assumption is, however, that the doctrine that spells out "the entire structure of means and ends within an organization" (Smith & Keith, 1971, p. 21) is precise and holds shared meanings for those who will have to implement. In their study, Smith and Keith found that this could not be assumed:

Perhaps, the most critical doctrinal outcome for the organization was the inability of a number of the individual conceptions to become merged into a common enough framework, an agreed interpretation of the doctrine . . . Differences as to teaching methods, materials, pupil control, and staff organization were prevalent. (p. 37)

Conceptual clarity of the innovative doctrine can be difficult to attain for a variety reasons stemming from (1) conflicting values within the doctrine itself, (2) the affective, "lofty" and general terms it may use to describe the innovation, and (3) problems associated with individual interpretations of the doctrine.

### Latitude for Adaptations

The outcomes of any change effort may be inconsistent with original intent if individuals are given latitude to make adaptations. The literature is full of conflicting opinions on this as the debate over program "fidelity" vs. "adaptation" continues. McLaughlin (1976) states why she supports "mutual adaptation":

Because classroom organization projects require teachers to work out their own style and classroom techniques within a broad philosophical framework, innovations of this type cannot be specified or packaged in advance. Thus, the very nature of these projects required that

implementation be a *mutually adaptive process* between the user and the institutional setting--that specific project goals and methods be made concrete over time by the participants themselves. (p. 340)

Fullan (1991) labels adaption as "evolutionary planning" and Levine, Levine and Ornstein (1985) use the term "organic" implementation. Huberman and Miles (1984), however, found in their study of twelve innovative districts that enforcing program fidelity was a characteristic of one of the more successful change "scripts":

Enforcing fidelity for substantial, good-quality innovation really paid off--if it was accompanied by effective assistance. When adaptation went too far because of administrative 'latitude', what often occurred was blunting or downsizing, trivializing, and weak student impact. (p. 279)

"Opportunistic adaptations" is the term Huberman and Miles employ to describe those innovators who make adaptations that weaken the program design.

It is easy to understand why innovators would be tempted to make adaptations. Selznick (1966) says it best:

Organizations, like men, are at crucial times involved in an attempt to close the gap between what they wish to do and what they can do. It is natural that, in due course, the struggle should be resolved in favor of a reconciliation between the desire and the ability. This new equilibrium may find its formulation and its sustenance in ideas which reflect a softened view of the world. (pp. 48-49)

Common (1983) explains that adaptations really reflect the power struggle that exists in our schools:

It is this clash that transforms the surface countenance of policy-directed innovation into something far less benign. Implementation is, in actuality, the struggle for power over what and who will determine the nature of life in the classroom. (p. 42)

Coleman and LaRocque (1990) found that real change is rare and that adaptation, not real change, is the usual result.

Is there a solution? Crandall et al. (1986) suggest that the core components of a program should be identified:

. . . if core components are not accurately identified, later implementation decisions and adjustments may inadvertently eliminate important key elements. Identifying core components of the program is also important because it may help to evaluate the 'fit' between an innovation and the school more accurately, and to develop a more cognitive understanding of the nature and scope of the intended change. (p. 32)

Adaptations that eliminate key components of a program can undermine the innovative effort right at the outset; yet, it is important that there be some latitude for individuals to personalize the change. The problem of fidelity vs. adaptation entails a delicate balance--one that contributes significantly to the complexity of change in our schools.

## **Adoption of Innovations**

### **The Planning Stage**

The planning stage is critical to any change effort and yet it is frequently underemphasized. Charters and Pellegrin (1972) characterize what can happen when planning neglects the details of the program to be implemented:



. . . the staff ends the preparation--formulation period with half-considered, vaguely specified plans at best. How the school is envisioned to operate under the 'new program,' how staff members are expected to behave or relate to one another differently under the innovation, and how instruction will be conducted once the transition is complete are not concretely laid out. A working model of the program to be installed in the school has yet to be developed. Rather, 'details' of the program, teachers and administrators believe, will be worked out as they 'gain experience with it.' (p. 8)

The dangers of inadequate planning are summarized by Kritek (1976):

Specifically, planning that stops short of forging the link between program objectives and actual practice is defeating its own purpose. (p. 91)

Sarason (1971) says that effective planning should reflect an honest assessment of the real possibilities of implementing the change effort. Sometimes, careful examination leads to "starting nowhere":

One may decide *to start nowhere*, that is, the minimum conditions required for that particular change to take hold . . . are not present . . . it forces one to consider 'what other kinds of change have to take place before the minimum conditions can be said to exist.' (pp. 217-218)

If it is determined that the program should be adopted, then the problem of how to proceed looms large. Joyce and Showers (1982) suggest that educators learn from athletes and embrace coaching during implementation. This involves study of the teaching method to be employed; observations of demonstrations of the method by those who are relatively expert; practice and feedback; and coaching as the new method is worked into the teacher's repertoire. Joyce and Showers describe how teachers often begin with the wrong assumptions:

Perhaps the most striking difference in training athletes and teachers is the initial assumptions. *Athletes do not believe mastery will be achieved quickly and easily.* They understand that enormous effort results in small increments of change. We, on the other hand, have often behaved as though teaching skills were so easily acquired that a simple presentation, one-day workshop, or single videotaped demonstration were sufficient to ensure successful classroom performance. (p. 8)

Joyce and Showers also point out that it is common to get much worse before one gets better in the practice of change. Educators, expecting that change can come quickly and easily, may become discouraged and abandon the practice before they have given themselves the chance to really use it.

Sometimes the process for proceeding with innovations involves pilot projects. Fullan (1991) and Svoboda and Wolfe (1974) note that the fewer people involved in an innovative effort, the more likely it will succeed because conceptual clarity and planning is easier when fewer people are involved.

While pilot programs can still face the complexities confronted by school-wide programs, they can protect the larger environment from any "blunders"

(Svoboda & Wolfe). As Crossley (1984) points out:

Paradoxically a successful pilot project could be one in which the attempted innovation is judged to be too problematic for widespread replication. In such instances initial investment returns a timely, valuable and 'successful' warning of what is *not* possible. (p. 113)

Resource availability is another critical component of the planning stage. As Kritek (1976) points out, new programs place great demands on resources:

The task of beginning a program takes more resources than will later be needed to keep the program running. In these days of energy shortage, those of us who drive are only too conscious of the greater resources needed to start our cars from a dead stop compared to the resources required to keep the car moving at a constant speed. (p. 92)

Smith and Keith (1971) warn that if these additional resources are not available, the innovation lies in peril. Furthermore, since new programs are fraught with unanticipated consequences, "the unanticipated consequences will require an added increment of resources" (p. 85).

Acquiring the needed resources can be difficult. As House (1976) points out:

If the advocacy group is successful in competing for resources, others in the district are naturally opposed. To the extent that the advocates absorb money and promotions, there is less available for everyone else. (p. 339)

Loucks-Horsley and Roody (1990) discuss another difficulty:

Meeting current demands is becoming increasingly difficult, and searching out and implementing change takes a considerable amount of time and resources. It is far easier to maintain the status quo than to change. (p. 52)

In light of competing demands for resources, it is very important that early planning identify both short and long-term resources to maintain the change program (Crandall et al., 1986; Kritek, 1976).

### Motives for Adoption

Despite all of the recent attention on school goals and philosophy, Larson (1991) found that no staff member in his study "mentioned school philosophy or goals as a stimulus for innovation" (p. 551). Fullan (1991) says that adoption is related to relevance and a sense of personal need for the innovation. Longo (1983) found that adoption can fill an emotional need:

If the idea takes hold at all, there appears to be a rush to praise its virtues. The response seems to be predicated upon the hope that a change in the way we do things will bring about better results. It is the emotional need as much as the idea itself that attracts a following. Whatever the cause, there seems to be an initial acceptance based on a desire to believe the promise of the new approach or technique suggested. (p. 400)

He continues:

This rejection of the present is, for some, part of the allure, for as noted, the reasons for the changes sought might be as much personal as they are philosophical or educational. (p. 401)

It would appear that there are a variety of personal reasons for adopting innovations that are dependent upon the needs of the individual. Huberman and Miles (1984) identify four main motives for adoption: (1) problem-solving, (2) professional growth, (3) career advancement, and (4) added funds. Smith and Keith (1971) explore at length an added dimension called "true belief" (this is explored under "Personal Fit"), while Fullan (1991) notes that sometimes adoption is done for purely "symbolic" reasons, that is, to give the impression that change is happening.

Clearly, the motives for adopting change are many and varied. Still, they appear to have one element in common--the reasons for adopting change are more often than not personal in nature.

### Personal Fit

#### Personal Orientation Toward Change

Personal risk is involved every time change is embraced. Hoffer (1963) says it best:

We can never be really prepared for that which is wholly new. We have to adjust ourselves, and every radical adjustment is a crisis in self-esteem: we undergo a test, we have to prove ourselves. It needs inordinate self-confidence to face drastic change without inner trembling. (pp. 1-2)

This being the case, why do teachers choose to adopt change? The Rand Change Agent study (1973-1978) cited teacher efficacy as an important predictor of success (G. White, 1990). Guskey (1988) defines efficacy:

. . . they firmly believe that they can help nearly all students learn, even those who may be difficult or unmotivated (Berman & McLaughlin, 1977). These highly effective teachers tend to be very positive in their *feelings about teaching* and are generally *confident* about their teaching abilities (Brandt, 1986). (p. 64)

Guskey continues to say that these teachers are the most receptive to new practice. McLaughlin and Yee (1988) also speak of "self-efficacy" as an important personal factor in innovative efforts. Larson (1991) also cites the importance of competence building efficacy and efficacy building innovation.

A notion related to efficacy comes in the form of teacher commitment to improvement. Wideen (in press) found that "the personal and moral commitment to change are far more important to teachers and principals than are the technical aspects of change" (p. 162). Little (1982) calls this commitment to change a "norm of continuous improvement" that contributes greatly to change endeavours. Commitment can also take the form of increased participation. Punch and McAtee (1979) found from a study in Western Australia that there was a strong positive relationship between teachers' participation in the school system and their receptivity to change.

Another aspect of personal orientation toward change may stem from the notion of adopter "types." Rogers (1971) identifies four major types: (1) the innovator who is eager to try new ideas, (2) the leader who is open to thoughtful change, (3) the early adopter who is cautious and deliberate in following others' lead in adoption, and (4) the late adopter who is resistant and "set in his ways."

Huberman (1989) offers yet another explanation for varying personal orientations toward change. He explores the professional life cycle of teachers and discovers that the period of "experimentation and activism" that happens roughly at mid-career is shrouded by cycles less receptive to change.

Since it would appear that personal orientations to change can vary, it is important that implementation give individuals room to implement at varying rates. As Wideen (in press) points out in his study:

What may have been a daring initiative to one teacher, was being seen as last year's discard to another. Innovative practice was becoming something defined in the mind of the teacher undertaking it, not something that could be described across the entire school . . . The implementation of the so-called innovation had indeed become a journey rather than an event, a journey that followed several different pathways. (p. 62)

It is important to note, however, that even though teachers may be receptive to change, and allowances for varying rates of acceptance are accounted for, this may not be enough since "such willingness may be overridden by constraints on change that are beyond the teachers' control" (Kozuch, 1979, p. 230). Giacquinta (1975) noted the following in his study of a "failing" innovation:

Moreover, of clear and major importance was the fact that the originally receptive teachers *became* unwilling to carry it out . . . Put another way, they came to believe that some of the perquisites accruing to them as teachers in their school system would be in serious jeopardy were they to continue their implementation efforts. (p. 109)

Even the most receptive teacher can lose enthusiasm for the effort if other important implementing factors are not in place. Once again, this underscores the complexity of change and the interactive nature of critical components.

### True Belief

Smith and Keith (1971) examine Hoffer's (1951) description of the "true believer" and find that the personnel in their study of an innovative school closely resemble his description. The innovators are "crusaders":

The uniqueness, the separateness, the differentness, the intensity of the sentiments and behaviours of the individuals engaged in an enterprise of this kind must be emphasized. Thus, it is both the remedial effort with its extraordinary intents and the accompanying zeal and enthusiasm that help define the role of the crusader. (Smith & Keith, 1971, p. 101)

Smith and Keith go on to describe the intensity of the crusade:

It is the doctrine, the facade, and their subtleties, for example, shared beliefs in their validity, the rituals that preserved and cultivated them for their presentation to those who 'do not yet know' that provided reassurance in the face of no demonstrable evidence for their potential successes and even in the presence of failure. It is this 'true belief' in the ultimate vitality of the elements of the doctrine and facade that enables participants to speak of 'next year,' 'when I go . . . , I'll do . . . ' and seek further opportunities to continue their mission. From the doctrine and facade, comes the motivation to carry on beyond what real day-to-day results seem to justify. (p. 101)

In follow-up interviews fifteen years after the original study, Smith, Kleine, Prunty and Dwyer (1986) were interested to find the pervasiveness and "staying power" of the Kensington staffs' belief systems. While all staff were not consistent in the intensity of their beliefs in the "new elementary education system," all participants had nonetheless continued their interest in educational reform. Smith et al. draw an interesting conclusion:

Our teachers pick experiences and are picked for experiences which amplify and deepen the point of view. In effect, the experience and rationale follow the intuitions. If that is more generally true, the



epistemological consequences are far reaching - 'positive' knowledge about practical action seems a little less than positive. (p. 141)

When one experiences "true belief," educational reform is like a secularized religion (Smith & Keith, 1971).

### **Personal Readiness--Requisite Skills and Knowledge**

References are made in the literature about the lack of knowledge utilization on the part of teachers who innovate (Crandall et al., 1986; House, 1976; Miles, 1980; Tye & Tye, 1984). It has been found that frequently inner resources and experience are used more than related research findings. As Crandall et al. observe:

Yet, during development, teachers consistently excluded all sources of knowledge beyond their own classroom experience. While relying on experiential knowledge is useful for day-to-day coping, it is not well suited for generating a complete curriculum. (p. 29)

Tye and Tye (1984) found that "knowledge flows to our schools unevenly, without focus or plan" (p. 320). Most new ideas appear to come from social interaction (House, 1976; Tye & Tye, 1984). If knowledge utilization is critical to informed change efforts (Tye & Tye, 1984), then we must focus on means of allowing innovators to access it. In addition, researchers must pay more attention to producing knowledge that is less general and more relevant to the needs of teachers (Wideen, in press). As Smith and Keith (1971) aptly point out from their study of Kensington school:

In short, one of Kensington's greatest outcomes is pointing out the limited scholarly underpinning in much of professional education.

When one deviates from the conventional wisdom of self-contained classroom, common goals, textbooks as central means, then major questions arise for which there are most limited answers. (p. 336)

Perhaps part of the reason why knowledge is not utilized as often as it should may be related to the very demands of teaching itself. Teaching is time consuming enough and when one adds change, the result can be role overload (Charters & Pellegrin, 1972). Corbett and D'Amico (1986) affirm this:

. . . the time it takes to understand an innovation and translate it into practice conflicts with the time staff members need to perform their duties. (p. 71)

Crandall et al. (1986) say that teachers cannot, by the very nature of their jobs, develop successful programs unless they are provided with additional resources and support.

If the resources are in place, time must be spent on developing the "technical readiness" of the innovators. As Huberman and Miles (1984) explain:

So lack of *technical readiness* seemed to hurt more than the presence of *attitudinal or cognitive readiness helped*, at least in the initial phase. (p. 77)

Fullan (1991), Charters and Pellegrin, and Smith and Keith all acknowledge the importance of requisite skills and competencies to perform the new practice. Time must be given to address this form of technical readiness.

### Scope of the Change

Cuban (1988a) speaks of "first order" and "second order" changes. First order changes make what already exists more efficient without altering basic organizational features while second order changes alter the organization fundamentally. He argues that the most lasting changes since the turn of the century have been of the first order kind with the result that schools remain fundamentally the same. Fullan (1991) calls these second order changes "multidimensional" changes and notes that these changes are the hardest to implement since they represent "real" changes. At the same time, Huberman and Miles (1984) tell us that we will usually get more change if we attempt more change. These authors seem to suggest that large scale change is where significant change lies, yet they acknowledge that this scale of change is the hardest to implement.

The problems of large scale innovations are well documented in the literature. Longo (1983) notes:

We seem to seek changes that are broad, deep and all encompassing. The very scope of the changes we try to effect and the level in which we demand they succeed often appear to doom them in advance to failure. Unwilling to search for or accept small increments of change, we seem permanently consigned to large-scale disappointments. We have fallen into a pattern of attempting change hastily (and too broadly), abandoning it swiftly (before it has been fully tried), and moving on to the next promise that is available. (p. 400)

Smith and Keith note that large scale innovations bring with them a high level of uncertainty and unintended outcomes. In addition, the "multiplicity of

components makes for much greater variety and, hence, increases the complexity of the decision-making process" (p. 398).

There appears to be much support in the literature for change of a smaller scale (Huddle, 1987; Larson, 1991; Leithwood & Russell, 1973). Fox (1992) gives the following advice:

Attend to the scale of change for a school. Because change is incremental in nature start with small vs. large-scale change, even if an overall dramatic innovation is being considered. In order to see the immediate results necessary for the feeling of personal success and people participation, goals must be met. The more specific or close-at-hand the goal that fits into the overall change being sought, the more quickly the results become apparent. Early success creates a greater psychological openness toward the next innovation. (p. 74)

Smith and Keith also make the case for a more "gradualist approach" to educational change by citing the following benefits:

None the less, we hypothesize that a gradualist strategy which implies an alteration of a few components involves (1) lower levels of uncertainty and fewer unintended outcomes, (2) decreased time pressure, (3) an increased interval for major change, (4) limited decisions related to the change, and (5) decreased demand on resources will have as a concomitant the increased likelihood of success in initial goals. (p. 373)

### Cost-Benefit Analysis

The risks associated with innovative efforts have been noted--especially large scale innovations. It is documented in the literature that quite often teachers will feel incompetent as they learn a new practice (Fullan, 1972; Showers, 1987). Showers describes this sense of inadequacy:

It is highly probable that people behave much less efficiently during the first trials with any new model and that their students behave much less appropriately as well. Quality of performance often diminishes during the period of transition from skill acquisition to complete vertical transfer. Because of this sense of decreased efficiency, the teacher feels that his or her performance has actually declined during the crucial stages first attempting to use a new model in the classroom. (p. 134)

This feeling of incompetence may be compounded because teachers do not have the luxury of developing the new practice in private (Joyce, 1969).

Huberman and Miles (1984) note feelings of incompetence and overload in their study:

The users complained of depleted energy, of 'so much coming at me,' and of not being able to keep up. (p. 73)

Smith and Keith (1971) describe the frustration and anxiety that came with the school they studied:

As hostility increased, as portions of the program failed, as administrative support changed, several faculty members were subjected to intense frustration, anxiety, severe personal debilitation, and withdrawal. At this point, again, the function of faith was illustrated, for a movement such as this needs something good enough to justify the problems, the trouble, and the risk. (p. 104)

The costs associated with change are many. To offset the costs, one would expect some benefits from the total commitment that innovation demands (Smith & Keith). When these benefits are not present, and if the costs are high, the individual will have very real concerns regarding his or her involvement with the innovation.

Hall (1979), in identifying the stages of concern associated with innovations, notes that "stages of concern about innovations move from early self-oriented concerns, to task-oriented concerns to ultimately impact-oriented concerns" (p. 204). Early users want to know how the innovation will affect them personally; therefore, it makes sense that change efforts attend to the personal impact of change (G. White, 1990).

### **Organizational Fit**

#### **Educational Organizations as Loosely Coupled Systems**

In order to determine how well an innovation will fit the organization, one has to have an understanding of what educational organizations are like. Most of the literature seems to favour Weick's (1976) idea of the educational organization as a loosely coupled system. The differences between a tight and loose system is explained by Weick (1982):

All of these instances of tighter coupling share four characteristics: 1) there are rules, 2) there is agreement on what those rules are, 3) there is a system of inspections to see if compliance occurs, and 4) there is feedback designed to improve compliance . . . In systems that are more loosely coupled, at least one of these four characteristics is missing. Typically the missing component is either consensus on policies or procedures or inspection that occurs frequently enough so that significant deviations can be detected. (p. 674)

Herriott and Firestone (1984) take the idea of loosely-coupled systems and show in their study that high schools "cluster" around the loosely-coupled model of organizations. They conclude that "a major portion of the school's central purpose cannot be controlled by the administrative cadre" (p. 44) and

that these schools operate largely on the "logic of confidence" that "each person can do his or her work with the knowledge that others will not interfere" (p. 44). They point out that this kind of organization makes high schools not readily amenable to school-wide improvements. Joyce (1982) concurs:

What the loosely coupled organization really adds up to is that it is difficult for anyone at any level to generate and maintain innovation in the curricular and instructional domains. . . . (p. 50)

Hall, Rutherford and Huling (1984) note that individuals have a "compartmentalized" view of the school and they caution that "relying on limited or segmented views is highly precarious" (p. 62).

Smith et al. (1988) take another view that recognizes the interdependency of a "nested system":

The generalization of our point is that each level of the system has its own model way in which influence, power and control are exerted and that each system 'nests' within a larger system. (p. 278)

In other words, the school nests within the district, the district nests within the community, the community nests within the state, and the state within the national and international scene. If schools are loosely coupled organizations nested within larger systems, then special attention must be paid to linkages between the systems in any innovative effort.

### Structural Linkages

Corbett and Wilson (1983) describe structural linkages as the "ways by which a school can translate its intent through the control of members' behaviour" (p. 88) and by limiting the discretion of organizational members over the tasks they perform. Control and limits to discretion can be particularly problematic for innovations, particularly if the innovation involves a new organization that operates as a "subsystem" within the organization. Smith and Keith (1971) note that the protected subsystem has been utilized frequently as a change strategy and that typically the "isolation usually has been an integral part of utopian attempts" (p. 381). The benefits derived from such a change strategy are outlined:

It shows how separation from the constraints of norms and structures, from the distraction and demands of the day-to-day environment, and from reduced penalties for error may generate new sentiments about change and may encourage the playing of new roles. At the same time, the larger environment is protected from any major error that may occur within the temporary system. . . . (pp. 380-381)

No subsystem, however, can operate in total isolation so when it comes up against the permanent system, many problems arise. The new organization disrupts the usual organizational chain of command, authority relationships and faces many "problems of the moment" as it tries to "build the many intangible and agreed-on ways of doing things" (Smith & Keith, p. 86). The absence of established norms, procedures and plain experience can prove to be a major handicap. The personal costs can also be high--Smith and Keith cite



confusion, frustration and emotionality as the faculty of their innovative school spent inordinate amounts of time establishing such procedures. As Miles (1980) points out:

Much political skill is required. That a new school is different and innovative creates uncertainty, which means that people trying unfamiliar ideas need abundant courage and energy, especially in facing opposition from their environments. (p. 3)

An added difficulty comes when the subsystem attempts to become permanent. Miles (1964) states:

The possibility of the temporary system's becoming permanent is never in the foreground, often remains indeterminate, and is frequently out of the question completely. (p. 432)

Stinchcombe (1965) observes that any new organization is faced with the "liability of newness" that makes permanence much more difficult:

As a general rule, a higher proportion of new organizations fail than old. This is particularly true of new organizational *forms*, so that *if an alternative requires new organization*, it has to be much more beneficial than the old before the flow of benefits compensates for the relative weakness of the newer social structure. (p. 148)

Any change effort will experience organizational barriers but for the temporary subsystem this is particularly difficult. House (1976) says it best:

Contrary to the dreams of reformers, most innovations are contained within the school structure like an encapsulated bacillus. (p. 339)

### Cultural Linkages

There is much written in the literature on the importance of school culture to the change effort. Corbett et al. (1987) define culture:

Culture describes the way things are. It provides the contextual clues necessary to interpret events, behaviours, words, and acts--and gives them meaning. Culture also prescribes the ways in which people should act, regulating appropriate and acceptable behaviours in given situations. Culture, thus, defines what is true and good. (p. 37)

Firestone and Wilson (1984) offer an additional component to culture--that of commitment:

Cultures also influence teachers' commitments, including their willingness to keep working at school, their emotional ties to it, and agreements to follow the rules and norms governing behaviour. (p. 7)

Corbett et al. caution that it is important to make sure the innovation fits the culture of the school:

Managing change, like politics, is the art of the possible. But it requires knowing what changes are inherently compatible with the local culture, which ones are not, and which ones can be repackaged to fit existing norms. (p. 57)

If cultural linkages with the school are important, then what kind of culture is conducive to change? Little (1982) cites "norms of continuous improvement" and "norms of collegiality" as important requisites for successful schools. Showers (1987) supports this view:

We have learned that individual characteristics are important but will not alone account for sensible implementation of innovations. We believe that positive school climates that encourage experimentation and the collegial study of teaching also support successful implementation. (p. 68)

Coleman and LaRocque (1987b) found that the difference between high performing and low performing districts was in the value and utility of collaborative work and differences in personal attitudes toward the

organization. Corbett (1982b) supports the importance of collaboration by citing the lack of it as a "predominant barrier to the speed of change throughout a school" (p. 34).

It should be noted, however, that even if norms of collaboration or continuous improvement exist, certain situations can adversely impact the climate for change. Hearn (1972) notes:

Strikes, student confrontations, racial conflicts and other emotion-laden crises are not generally regarded as the proper setting for innovations. But often, during such times, changes *must* be made . . . It is true, of course, that innovating during a crisis calls for the kind of coolness found under fire in a battle. Most of us lack the talent. (p. 359)

Another adverse situation involves the implementation of too many projects at once (Corbett & D'Amico, 1986; Crandall et al., 1986). As Corbett and D'Amico point out, "the most bothersome distraction usually comes from the system itself in the form of competing projects" (p. 71).

### Linkages to Constituents

Constituents in this case means students, parents and the community where the innovation is taking place. Much of the literature emphasizes the importance of communicating with constituents (Krueger & Parish, 1982; Miller, 1970). Parish and Arends (1983) cite from a speech presented by Scott, Meyer and Deal (1980) which said that "it is more important for a school's survival to please its constituents than to find better ways to improve

its technical core" (p. 63). No doubt communication is important--especially accurate information. Krueger and Parish (1982) explain:

It is important that the flow of communication among all those involved with the implementation of a new program be handled in such a way that accurate information is available and is shared in such a manner that rumors can be dealt with early and not allowed to spread. What is believed to be true has the same credibility as that which is true. (p. 136)

Cole and Harty (1973) identify four roles of students and the community in innovative efforts: innovators, resisters, facilitators and evaluators. They note that if the change agents have low status and little power, active enlistment of the community and students can provide the support necessary to keep the innovation going. Wilson and Rossman (1986) also note that the community offers a substantial pool of expertise that the innovative school can draw upon.

It is unfortunate that the important role that these constituents have in our schools is often neglected (Cole & Harty, 1973; Fullan, 1972; P. Miller, 1970). Of particular significance is the lack of attention placed on student fit with the innovation. As Antonelli (1973) observes, "the educator must remember that many innovations have failed for the unrealistic demands they placed on the abilities of students" (p. 12). Ornstein and Hunkins (1988) give a specific example:

We cannot introduce ideas concerning critical thinking or problem solving when students cannot read or write basic English or refuse to behave in class. (p. 68)

In addition, Marsh and Penn (1987-1988) found that students experience the same concerns predicted by Hall et al. (1973) when they engage in innovations. Fullan (1972) also recognizes student concerns in innovative efforts:

To say that students do not have opinions and feelings about these matters is to say that they are objects, not humans. Those responsible for innovations (whether teachers, principals, or others) would be well advised to consider explicitly how innovations will be *introduced* to students and how student reactions will be obtained at that point and periodically throughout implementation. (p. 189)

Marsh and Penn note that student concerns impact how they participate in change:

Moreover, student concerns are important. Patterns of student concerns influence the way students participate in the new form of instruction and are related to the achievement of students. (p. 12)

Studies done by Huberman and Miles (1984) and Smith and Keith (1971) observe that pupil behaviour was more erratic as a result of the changes introduced and that this, in turn, contributed to teacher uncertainty and anxiety. As Wideen (in press) points out:

The significant issue arising here is the fact that the student becomes the final arbitrator of educational change. One way or another, if students think that the teaching they receive is not meeting their needs, they will either make life miserable for the teacher, grin and bear it (and in doing so, learn little), or as we have seen recently, simply leave school. (p. 130)

### **Innovative History of the Organization**

The innovative history of an organization can have an impact on those who would innovate (Fullan, 1991; Kozuch, 1979; Smith et al., 1987). As Fullan points out:

The importance of the district's history of innovative attempts can be stated in the form of a proposition: The more that the teachers or others have had negative experiences with previous implementation attempts in the district or elsewhere, the more cynical or apathetic they will be about the next change presented regardless of the merit of the new idea or program. (p. 74)

Successful implementation begets more innovation success; failed implementation deters innovation success.

### **Leadership in Innovations**

#### **Style of Leadership**

Hall, Rutherford, Hord and Huling (1984) and Hord and Hall (1987) identify three styles of leadership: responders who "let it happen"; managers who "help it happen"; and initiators who "make it happen." Not surprisingly, they found the leadership style that worked best for innovations was that of the "initiator"--especially initiators who provide ample amounts of implementation support. Corbett (1982a) found that the main factor influencing the style of leadership a principal chose was in "his or her view of what the teacher-principal relationship ought to be" (p. 192). This view could be a "stay out of their hair" attitude or could entail a more active stance with regard to the day

to day activities of teachers. It would appear that "initiators" adopt the more active stance.

The literature cites many examples of how leaders can "make change happen." Miles (1983) believes that teacher-administrator harmony is the key to success:

It was very clear than an underlying variable we called *teacher-administrator harmony* was critical for success. Working relations between administration and teachers had to be clear and supportive enough that the pressure and stresses of incorporating something new could be managed together. (p. 19)

Common (1981), Corbett (1982a), and Corbett and D'Amico (1986) cite encouragement and recognition as being crucial for success. As Common (1981) notes:

A supportive and encouraging environment, created by the administrator, is vital. Teachers need to feel that their efforts are appreciated, or at least noticed and recognized . . . The administrator must encourage and maintain the teachers' willingness to implement the new curriculum as teacher morale is crucial to success. (p. 46)

Corbett (1982a) notes that the attention given need not be excessive:

Teachers did not expect principals to observe their classes more frequently or to engage them in long conversations about the new practice, but they greatly appreciated an occasional passing remark recognizing their innovative efforts or a sincere inquiry as to how the changes were progressing. (p. 191)

In his study of an innovative school, Wideen (in press) found that the leadership style most conducive to change contained a collegial orientation combined with the commitment to instruction that encouraged risk taking.

Much of the literature places an emphasis on the role of the principal as change agent. It is significant to note, however, that the principal cannot "make change happen" alone. As Smith et al. (1988) point out:

In American education, there is no such thing as the 'all powerful' change agent. And that is a very important finding, so we believe. (p. 145)

It appears that principals must form a partnership with staff if change will be successful.

### The Problems of Leadership

Leadership is complex and demanding. Larson (1991) speaks about the "real world" of principalship:

That world is characterized by a high volume work and a wide variety of tasks that are brief in duration, that are often interrupted, and that continually hinder principals from allocating more time to instructional leadership. (p. 552)

Miller and Lieberman (1982) go further to say:

Educational leadership happens, when it happens at all, within the cracks and around the edges of the job. (p. 366)

The role of the principal as instructional leader is seldom the reality in most schools.

Part of the reason for this lack of instructional leadership is that administrators seldom have the time to "lavish a great deal of direct attention on a particular project (unless, of course, the project happens to be the 'baby' of the administrator involved)" (Finch, 1981, p. 337). Furthermore,



administrator roles are very complex (Fullan, 1991; Miller & Lieberman, 1982). As Fullan explains:

The amount and number of areas of expertise expected of the principal--school law, curriculum planning, supervision of instruction, community relations, human resource development, student relations, administration--are ever increasing. (p. 147)

Miller and Lieberman note that "daily, the principal stands at the center of an arena of dissenting factions, sure to offend someone and to never please everyone" (p. 366). The principal has a difficult time keeping up with current demands let alone the demands of an innovation.

Lortie (1988) and Leithwood and Montgomery (1984) outline factors that "retard" innovative behaviour of principals. Lortie explains that there are few incentives for principals to risk change since "career contingencies" make it prudent not to "rock the boat." In addition, those who would change run the risk of colliding with a system of values that may see standardization as the "proper route to equity" (p. 80). It would appear that initiating change takes a great deal of courage for principals, too.

Teachers often do not appreciate the pressures placed on principals as Finch (1981) reports:

Throughout the study I became acutely aware that teachers seem unaware of pressures faced by principals and appeared to interpret a lack of attention as a lack of interest (in some cases it was just that). While I found nothing in the literature of change which spoke directly to this problem, it seems well known that administrators and teachers have different agendas and often feel the other is not interested in the 'Important Things'. (p. 338)

These differing perceptions can create problems for any innovative effort and needs to be recognized by both teachers and administrators. In addition, Miller and Lieberman (1982) explain how the administrator may be caught between "two worlds":

The reality is that there is a huge gap between what the role of the principal is supposed to be and what it actually is. For principals, there are two worlds; the world of 'is' and the world of 'ought'. (p. 367)

All of this adds up to a tremendous amount of pressure for the principal; a factor that needs to be considered in the change process.

### **Pressure and Support in Innovations**

Throughout the literature much emphasis is given to the importance of support for innovations. As Cox (1983) notes:

Most innovations of any size place demands that go beyond what individual teachers can or should have to deal with alone. This is where assistance and support from the principal, central office personnel, and outside helpers can make the difference between barely coping or abandoning the effort and achieving real change. (p. 10)

House (1976) and Arends (1982) state that the unsupported innovation will have great difficulty. As House observes:

Strong sponsorship is essential to rejuvenating the innovation when it encounters inevitable problems. The weakly supported innovation bobs and goes under without help. (p. 339)

As Gross, Giacquinta and Bernstein (1986) point out, organizational leaders are in the best position to provide the support needed for innovations:

. . . only management has the power to make changes in organizational arrangements that are incompatible with the innovation. And it, too, is the agency that can offer the type of rewards and punishments required if the staff is to be continuously motivated to expend the time and effort required to implement and innovate. Moreover, management can most effectively handle difficulties that arise and that inhibit the development or maintenance of these conditions. (p. 203)

Loucks and Zacchei (1983) found that it was best to have "ample and appropriate help from a variety of players" (p. 29) that include the principal, district coordinators and external facilitators. Furthermore, Loucks-Horsley and Roody (1990) add that a local person is needed to "orchestrate and coordinate the various forms of leadership and support required" (p. 55). This person usually comes from central office. As Hord and Hall (1987) point out, this second change facilitator role is important:

The study suggests that the second CF role emerges out of necessity at the school level. The second CF tends to be a staff person rather than a line administrator who supports, coaches, and monitors the day-to-day responses of teachers. These types of interventions are needed to complement the interventions made by principals . . . school improvement efforts can be enhanced by giving more attention and resources to developing this important role. (p. 86)

The principal need not be the sole provider of support in innovative programs.

Perhaps one of the most detrimental approaches to be taken by leaders in innovative efforts is that of a "stand back" approach. As Huberman (1983) comments:

In a curious and self-defeating sense, administration often construes school improvement as a self-abdicating process: one provides the resources, makes available a good instructional product, is on call to the people implementing the innovations, and then stands back. (p. 23)

Arends (1982) explains how this approach is viewed by staff:

At the same time, putting down members of a project staff or involved faculty by ignoring the project and its work was viewed as extremely unsupportive in every instance where researchers found that type of administrator behaviour. (p. 87)

The "stand back" approach can be characterized by two behaviours: "erratic or nonexistent advocacy" and "lack of social support and participation"

(Sivage, 1982, p. 22). As Sivage points out, this approach sends a clear message to staff:

This non-supportive approach to leadership conveys a clear message to staff: that the principal considers the project of little interest, concern, or value. (p. 22)

As Smith and Keith (1971) explain, "principals are important people in schools for what they do and what they don't do" (p. 11).

It is interesting to note, however, that when support is provided, there are varying perceptions of how enabling the support really is. Lewis (1988) explains:

Teachers gave a low rating to internal support from the principal and school district, reporting they did not receive much support during the three-year study and were not receiving support now that the study was over. Administrators, on the other hand, give high ratings to their own efforts to support teachers' use of FYC4. The disparity in the data suggests that teachers and administrators view support differently. (p. 61)

These varying perceptions can create problems and underscore the need for communication in innovative projects (Smith & Keith, 1971). In addition, Finch (1981) found that teachers and administrators held different criteria for

success. For administrators the key to success "appeared to be few discipline problems, causing little trouble and exceedingly positive visibility" (pp. 338-339). Huberman and Miles (1984) found that there were also varying perceptions on the difficulty of the innovation:

For central office administration notably, the innovations looked simple, clear, and manageable, in some instances, because the administrators, as partisans of the new practice, had studied it more closely. But it was probably more the case that new practices looked simpler and more tractable to people who would not themselves have to carry them out. (p. 64)

These varying perceptions with regard to the amount of support provided and the perceived difficulty of the innovation could be particularly problematic for innovations. Administrators may not provide all the support teachers see as necessary and would expect because they do not understand how difficult the innovation is.

What, then, is the appropriate kind of support for innovations as stated by the literature? An understanding of the innovation being attempted is very important (Common, 1981; Sivage, 1982). Smith and Keith (1971) summarize:

Administrative awareness, the possession of relevant information regarding the organization, seems mandatory for making decisions that move the organization toward its goals and that impinge on organization members in ways that maximize satisfactions and minimize frustration. (p. 267)

Once the leader understands the innovation and what it requires, it is important that he/she value and commit to it (Arends, 1982; Sivage, 1982; G. White, 1990). Common describes how important administrative commitment is:

Only if the administrator values the curriculum will he be willing to assume the prescribed roles and provide the necessary conditions for the teachers to implement the new curriculum. (p. 47)

Several other kinds of support are mentioned at length in the literature; for example, a realistic length of time for implementation (Cox, 1983; Corbett & D'Amico, 1986; Hall & Rutherford, 1976; Loucks-Horsley & Roody, 1990). As Charters and Pellegrin (1972) state, unrealistic time lines are an obstacle to innovation:

The unrealistic time perspective of those responsible for educational innovation, according to which basic and far-reaching changes to instructional roles and staff relationships are seen as accomplishable within a year or two. (p. 12)

Guskey (1990) adds that the first year is a "time of trial and experimentation":

Thus, if support and follow-up activities are withdrawn after a year in order to devote resources to yet another innovative strategy, the first strategy's true effects are not likely to reach many students. (p. 12)

The literature does not arrive at a consensus as to how long it takes to implement programs since each program will have its own time demands. But there is agreement that it generally takes longer than one year to successfully implement innovations.

Another area of support lies in resource allocation. Charters and Pellegrin (1972) state that "the apparent assumption that schools need little

additional resources (financial and personal) to cope with the massive organizational disruptions during the period of transition from one educational program form to a new one" (p. 12) is an obstacle to innovation. Appropriate resource allocation is very important (Sivage, 1982). Part of the resource allocation should take the form of on-going inservice and opportunities for collaboration. Fullan (1991) explains:

Failure to realize that there is a need for in-service work *during implementation* is a common problem (p. 85) . . . Research on implementation has demonstrated beyond a shadow of a doubt that these processes of sustained *interaction and staff development* are crucial regardless of what the change is concerned with. (p. 86)

Effective resource allocation should allow for on-going inservice and staff interaction throughout the implementation process.

Another important area of support for the leader of an innovative effort is to provide effective means to link the innovation with the organization (Charters & Pellegrin, 1972; Sivage, 1982). Arends (1982) describes the nature of this kind of support:

Sometimes this meant quelling or facing squarely resistance and hostility from other members of the administration or from faculty members who opposed the project; at other times, it meant helping project staff and others cut through bureaucratic red tape that prevented project resources from being spent in a timely fashion or project activities being effectively performed. (p. 85)

Common (1981) notes:

As planner the administrator must co-ordinate or organize those parts of the school that must operate in harmony in order to achieve implementation goals. This means locating and organizing the

necessary human, material, technical, and financial resources establishing facilitating organizational structures; creating effective communication networks; and developing viable decision-making procedures. (p. 46)

An important part of this includes effective communication patterns

(Common):

Of importance also are avenues and methods for resolving problems. Ineffective channels of communications, both formal and informal, will stymie decision-making. Communication must be timely, efficient, and appropriate if implementation problems are to be solved. . . . (p. 46)

Fullan (1991) concurs:

The success of implementation is highly dependent on the establishment of effective ways of getting information on how well or poorly a change is going in the classroom or school. (p. 87)

Monitoring seems to be an important way to get accurate information on the progress of innovations (Fullan; Sivage). Charters and Pellegrin (1972) cite "the absence of managerial and monitoring procedures" (p. 12) as another obstacle to innovation. Closely associated with support and monitoring is the notion of administrative pressure. Fullan notes that "successful change projects always include elements of both pressure and support" (p. 91).

Huberman (1983) adds:

If one wants specific results as an administrator, one has to shape them, which entails some benevolent authoritarianism, a combination of muscle, tenderness and tutoring. (p. 24)

Huberman and Miles (1984) in their study of twelve innovative districts found that the best "script" for change was the "enforcing" script where the



administration provided pressure to limit adaptations to the innovation during implementation yet, at the same time, provided support. Once again, this calls into question the debate over how much adaptation should be permitted. It would appear the role of the administrator in innovations is a difficult balance between pressure and support.

It should also be noted that there may be a personal element to the amount of pressure and support offered to an innovation. Administrators also have personal motives for adopting innovations. The notion of "symbolic vs. real" change has already been mentioned. Fullan (1991) elaborates:

A close examination reveals that innovations can be adopted for symbolic political or personal reasons: to appease community pressure, to appear innovative, to gain more resources. All of these forms represent *symbolic* rather than *real* change. (p. 28)

Finch (1981) suggests:

However, I suggest that in addition to assessing whether advocacy exists, that teachers also attempt to assess the reasons *why* the administrator is supportive (even reluctantly) of a particular project. . . . (p. 337)

Change is a personal experience for administrators just as it is for teachers.

Efficacy plays a role here as well:

Principals within the same system operating in almost identical circumstances will work with change or avoid it depending on *their* conception of the role. Just as teachers' sense of efficacy is important in bringing about school improvement, so is the principal's--perhaps more significant, because it affects *the whole organization*. (p. 167)

Leadership in innovations is very complex. Parish and Aquila (1983)

sum it up best:

Somehow, support seems like such an inadequate word to describe this synergetic process. (p. 36)

### **Innovative Features**

#### **The Content of Innovations**

The content of innovations is very important, yet it is frequently overlooked. R. Miller (1970) observes:

All too often we tend to lump all innovations into one basket, which is a gross oversimplification to the point of serious distortion. (p. 332)

Wideen (in press) continues:

Not only has subject matter been ignored in the recent literature on teaching and change, but the innovations themselves--which may or may not involve subject matter--do not seem to have received much attention as factors influencing the change process. Innovations in a subject such as mathematics are treated the same as a change in language arts, reading, or the more generic changes that might be expected in a workshop designed to improve the elements of instruction. It appears that an innovation is an innovation is an innovation. The particular stuff of the innovation is rarely of much consideration among those who propose to help teachers in the change process. (pp. 93-94)

As Loucks and Zacchei (1983) point out, "the 'what' of any school improvement effort is vitally important" (p. 28). One must consider the quality of the innovation to be implemented (G. White, 1990). As Kelly (1974) explains, the education field should pay more attention to this:

Unlike other institutions, we do not assess educational notions before they are put to use. If doctors were wont to try a new technique, carefully controlled experiments would be performed before that technique is used. In our office as educators we have a responsibility as great as that of any other professional: the psychic well-being of our students. (p. 75)

Assessment should include if the innovation is technically sound and based solidly in successful practice (Huddle, 1987; Ornstein & Hunkins, 1988). House (1976) goes further to say that access to assistance with the innovation is very important to the implementation process:

In addition, having *information* about new innovations is not the same as having *access* to them. For example, if I know about a new-model car, I cannot think seriously about buying it until a dealer near me has it. I must have access to it. Even then, I won't consider it prudent to buy unless the dealer is close enough to service the car. Likewise, even if the teacher should hear about a successful innovation, he must wait until he has access to it, normally through the school district. (p. 339)

The content of any innovative effort, it would appear, is as important as the process of implementation.

In noting the kinds of changes attempted, Ahrens (1973) comments that few changes are curriculum based; most are organizational or methodological in nature. Longo (1983) makes the further observation that there are differences in social reaction depending on the nature of the change:

Efforts to make changes in the way schools operate fall into a special category. They often attract an impassioned response that is out of all proportion to their potential impact. The schools simply occupy a unique position. They cater to the young and are so closely intertwined with deeper aspects of our overall social organization that response to suggested change is apt to be strong. We in education should know

this, yet we have not always made intelligent efforts to respond to it.  
(p. 399)

As Smith and Keith (1971) explain, changes in the goals of education will necessarily have major impact:

If one expands the array and priority of educational goals, then there is a necessary and major impact on instructional means. This seems a simple but exceedingly important point. Also it seems to be ignored or often overlooked. (p. 333)

Changes to goals and the instructional means of obtaining these goals may cause great response by constituents.

Orlosky and Smith (1972) note that changes to the organization of the curriculum is done at great risk:

Efforts to change the curriculum by integrating or correlating the content, or by creating new category systems into which to organize the content, are made at great risk. Complete or considerable displacement of an existing curriculum pattern is not likely to be permanent even if the faculty initially supports the change. This can be attributed partly to cognitive strain on the faculty, partly to upsetting the expectations of pupils and consequent parental distrust, and partly to faculty mores which tend to become stronger when threatened by change. (p. 414)

Changes involving the addition of subjects and the updating of content are more permanent than changes in the organization and structure of the curriculum (Orlosky & Smith). It is noted also, that changes to methods of instruction, while the reaction to them may not be so vocal, are also very difficult kinds of change to implement (Orlosky & Smith).

The content of any innovative effort is indeed very important.

### Teaming

Team teaching is, in itself, quite a drastic change to the standard "autonomous professional" approach to classroom organization. McLaughlin (1976), in referring to teaming, explains:

. . . change in classroom organization is inherently very complex. Innovations of this nature require the learning of new attitudes, roles and behaviours on the part of teachers and administrators--changes far more difficult to bring about than the learning of a new skill or gaining familiarity with a new educational technology. (p. 342)

Smith and Keith (1971) make an interesting observation in the field notes of their study:

'In my own self-contained classroom, I had all the freedom in the world. I could extend a learning experience or shorten it, or cut it out completely if I wished. Here, I am forced into a rigid schedule.' She said that it seems very odd and yet the freedom that they wanted was the thing that inhibited them and made them more rigid. (p. 151)

Interdependence is a very important feature of team teaching:

Cooperative teacher activity implies interdependence as contrasted with the autonomy that has generally been used to describe the typical organization of teachers. Interdependence in turn requires coordination. (Smith & Keith, 1971, p. 212)

Smith and Keith cite Thompson's (1967) definition of "reciprocal interdependence" as the one most suited to teaming. This means that the "outputs" of one teacher become the "inputs" for the others and this is very difficult to coordinate. Mutual adjustment is required:

In the team-teaching situation, the teacher must consciously rationalize his plans to a higher degree, he must submit them to his fellows for examination, he must examine their plans, and they must reach an

amicable compromise on the content and sequence functional for reaching agreed-on objectives . . . This is the essence of coordination by mutual adjustment. This is intrinsic to teaming as cooperative teaching. (p. 215)

It is not surprising then that teaming requires a heavy reliance on time, dependability, communication systems and tolerance of individual differences.

With regard to time, Smith and Keith (1971) observe the following:

Increased teacher time expenditure occurred in handling issues that typically an administrator would perform. This, in turn, meant less time for the preparation of instructional materials, plans, and lessons, which, in lieu of the general absence of textbooks, was vital. (p. 255)

In discussing time and dependability, Smith and Keith make the following distinction between the self-contained classroom and team teaching:

. . . the self-contained form deals with teacher-teacher time units on a yearly basis, but in team teaching, with a mutual adjustment mode of coordination, moment-to-moment allocations of time units are made. This obviously makes for an entirely different 'ordered combination of personal effort' with an emphasis on dependability as a means of securing continuity with the activities of the team. (p. 217)

In addition, effective communication is difficult to attain in team teaching situations:

In short, if mutually adjusted coordination is to occur, all parties to the reciprocal interdependence must possess relevant information. In complex cooperative situations this can result in too much information on some occasions and too little on other occasions. (Smith & Keith, p. 219)

Furthermore, Smith and Keith found that team teaching led to moment-to-moment decision making:

Frequently in the team, decisions would be made, and the results would be forgotten in the press of a later particular situation. This again indicates the increased emphasis on moment-to-moment communication and decisions that at Kensington were a concomitant of coordinated teams by mutual adjustment. (p. 223)

Teaming also places a heavy reliance on the tolerance of individual differences. Different personalities will bring different orientations, as Smith and Keith note:

A variety of dimensions seem to run through this: the realist versus the idealist, the practical versus the dreamer, substance versus process, and deductive versus inductive. (p. 95)

These differences will have impact on the coordination of the team effort.

They summarize other personal differences that will affect teaming:

In summary we would accent: (1) the noise and distractions from one group to another, (2) the varied competencies in the management aspects of teaching, (3) the consequence of having to live with your team members' style, (4) the impact of limited teaching experience in a team, and (5) the bringing of the goals of individualized education into juxtaposition with a team organization. (p. 324)

Teaming is indeed very complex and difficult to coordinate.

### **Individualized Instruction**

One of the persistent problems facing the whole area of individualized instruction is contained within "differentiated means" versus "differentiated goals" dilemma. When one chooses differentiated goals, one may face the criticism of "why should my child not be taught what my neighbor's child is taught?" (Smith & Keith, p. 333). This may be a very difficult question to answer.

In addition, Ausubel (1963) cites another difficulty with individualized instruction:

One extreme point of view associated with the child-centered approach to education is the notion that children are innately equipped in some mysterious fashion for knowing precisely what is best for them. . . . (p. 10)

Sometimes when students are given the freedom to engage in individualized instruction, they choose not to accept it.

### Facilities

In discussing open classrooms, Weick (1982) observes:

Open classrooms are tightly coupled in the sense that one person's actions cannot easily be ignored by others; visual and aural dependencies exist whether or not people want them. (p. 673)

Smith and Keith (1971) note:

We have been struck by the too easy generalization that physical openness, that is, an absence of walls, leads immediately, directly, or simply to freedom in teaching and learning. A case can be made, we believe, that physical privacy provides some major contributions to freedom. (p. 196)

Difficulties associated with open classrooms lie in moving students from area to area while minimizing disruption, and also in how "individuals vary in the degree to which they emphasize neatness and orderliness, and in their tolerance for variation on these dimensions among their team members" (Smith & Keith, p. 204).



## **Outcomes: Intent vs. Reality**

### **Unanticipated Consequences**

Uncertainty in implementation is a given (Glickman, 1987; Huberman & Miles, 1984; Longo, 1983). There are many variables associated with change as Fullan (1991) points out:

. . . the total number of variables (and their interactive, changing nature) is so large that it is logistically infeasible to obtain all the necessary information, and cognitively impossible for individuals to comprehend the total picture even if the information is available. (p. 99)

The presence of unanticipated consequences means that "rational planning models, as we have seen, do not work" (p. 108).

Glickman (1987) states that it is very important that we recognize the unknown elements of change:

Instructional improvement is a constant cycle of decisions, discoveries, and further decisions, as we explore the unknown. In accepting uncertainty, we unlock school reform and enter a new phase of professionalism. (p. 122)

If we accept unanticipated consequences as a part of the change process, the problem then remains how to best deal with them. McLaughlin (1976) states that "planning activities that are on-going, adaptive, and congruent with the nature of the project and the changing institutional setting are better able to respond to these factors" (p. 346). There is a danger, however, in becoming too adaptive. Smith and Keith (1971) make the case that "unanticipated consequences are the means of organizational change" (p. 299). They note

that as the staff in their study coped with unanticipated events, they changed the basic structure of the innovation. When this happens, there may come another unanticipated outcome:

Unanticipated outcomes that are viewed as functional for the system or on which some positive feedback has been obtained may be accepted and/or rationalized as goals after the fact. (Smith & Keith, p. 401)

Perhaps this is why monitoring and feedback are essential. Kritek (1986) states:

. . . the prospect of unanticipated outcomes would seem to demand the provision of a monitoring mechanism that will identify problems that could not be anticipated and a feedback mechanism to communicate the problems to program managers. (p. 98)

McLaughlin (1976) has this to add:

Past research on implementation is almost unanimous in citing 'unanticipated events' and 'lack of feedback networks' as serious problems during project implementation. (p. 346)

### **Program "Blunting"**

Charters and Pellegrin (1972) concur with Smith and Keith on the problems of redefined goals:

One common strategy for reducing dissonance is to redefine project goals so that they correspond to whatever is presently occurring. Considering the ambiguity of the original definition, re-definition is not hard to accomplish. (p. 10)

Common (1981) has this to add:

A consequence has been that teachers simply do not change, thus blunting the effect of the curriculum. A process called "assimilation to the familiar" or "co-optation" means that the teachers define new skills

in a manner consistent with past or traditional values, norms, habits, and practices. Therefore, no change occurs and consequently no implementation happens. (p. 45)

Longo (1983) calls this the "abandonment stage":

The innovation is at this time in its most critical phase. Proponents are faced with the hard facts of organizational life as well as the demands for instant success that inevitably follow (and destroy) so many of our new ideas in education. The pressures are great and a redefinition of goals, a clarification of purpose, and some changes in procedure are necessary. (p. 40)

Longo points out that this is the time when the innovation is in need of nourishment, but unfortunately, "it is also the time when most of the sources of inspiration and encouragement abandon the cause . . ." (p. 40).

### "Facade"

Many innovations take on a separate "public face" that differs markedly from what is actually occurring. Smith and Keith hypothesize that "the more formalized the doctrine becomes and the more internal problems that exist, the greater the degree of masking that will occur . . ." (p. 47). Charters and

Pellegrin (1972) observe:

As the first year of implementation proceeds, it is punctuated by visits from parents, touring educators, dignitaries, and the like whom the staff members must describe and often defend their "innovative program" . . . These definitions are produced for external consumption, not internal specification of the program, and tend to be couched in the global, idealistic language of the project proposal. The staff members' private definitions of what "actually" is going on, however, vary markedly from the facade that is presented to outsiders, creating a kind of cognitive dissonance that must somehow be resolved. (p. 10)

Smith et al. (1987) note that this is a problem that is frequently ignored. In Smith and Keith's (1971) study they note:

These discrepancies have led us toward skepticism and caution with respect to any 'feature' story about educational matters. Administrators who seriously try to keep up with the Jones District--or its facade--seem to be creating a new kind of problem while they are attempting to solve the original one. (p. 53)

### Summary

The literature on educational innovation underscores the complexity of both the process and content of change. It would appear that change is not a clear, rational process at all; rather, it entails the complex interaction of a variety of variables.

The complex nature of change is emphasized as the literature begins by pointing to society's lack of agreement on educational values (Crandall et al., 1986; Cuban, 1988b; Huberman, 1972; Parish & Krueger, 1987) and the lack of consistency that may be present in innovative doctrine (Smith & Keith, 1971). Both have the effect of making change controversial and difficult to attain. Further, the literature warns of innovative programs that are spelled out in theoretical terms since it is difficult for individuals to adequately interpret them for effective implementation. The difficulty with mandated change is also documented in the literature (Glickman, 1989; Loucks-Horsley & Roody, 1990) as is the unresolved debate on fidelity (Huberman & Miles,

1984) vs. mutual adaptation (McLaughlin, 1976) in educational implementation.

The literature also stresses the importance of adequate planning for innovation. Effective planning includes assessing the real possibility of implementing the proposed change (Sarason, 1971), and, should the proposal be adopted, defining the process for proceeding can be especially difficult (Charters & Pellegrin, 1972; Kritek, 1976). Joyce and Showers (1982) remind us that teacher practice with the innovation is likely to get much worse before it gets better. Further, the necessary resources for implementation must be acquired in the planning phase (Kritek, 1976; Smith & Keith, 1971).

The risk associated with change is well documented in the literature and yet educators continue to attempt innovation. It would appear that teacher efficacy plays a significant role in this process (Guskey, 1988; Larson, 1991; McLaughlin & Yee, 1988; G. White, 1990). Hoffer (1951) identifies the "true believer" who is committed to the remedial effort of the change, while Smith and Keith (1971) comment on the "staying power" of innovations fueled by this kind of commitment.

Lack of knowledge utilization in innovation is also evident in the literature. Crandall et al. (1986) found that experiential knowledge was more frequently used. This may be partially due to role overload (Charters & Pellegrin, 1972) during implementation. The dangers of large scale innovation

are also well documented (Fox, 1992; Huddle, 1987; Larson, 1991; Leithwood & Russell, 1973; Longo, 1983; Smith & Keith, 1971). Moreover, the literature notes the personal costs associated with change (Fullan, 1972; Huberman & Miles, 1984; Joyce, 1969; Showers, 1987; Smith & Keith, 1971). Hall (1979) identifies the "stages of concern" with innovation--in the initial stages these concerns are very self-oriented and as experience with the innovation is gained, the concerns become more task-oriented and impact-oriented.

There is evidence in the literature to suggest that schools fit a "loosely-coupled" organizational structure (Weick, 1976) and that this presents problems when introducing innovation (Herriott & Firestone, 1984; Joyce, 1982). The need for linkages between the innovation and the permanent system is emphasized in the literature (Corbett & Wilson, 1983; Miles, 1980; Smith & Keith, 1971; Stinchcombe, 1965). These linkages may be structural and cultural (Wilson & Corbett, 1983). Further, the importance of linking the innovation with the constituents is also emphasized in the literature (Antonelli, 1973; Cole & Harty, 1973; Fullan, 1972; Krueger & Parish, 1982; P. Miller, 1970; Ornstein & Hunkins, 1988; Parish & Arends, 1983).

The literature stresses the role of leadership in innovation and it is recognized that leadership is demanding and difficult (Fullan, 1991; Miller & Lieberman, 1982) and that it is often difficult for leaders to adequately attend

to innovations (Lortie, 1988; Leithwood & Montgomery, 1984). Leadership, however, is critical to the success of innovations (Arends, 1982; House, 1976). The literature extensively describes the support, feedback and monitoring that is required for effective implementation (Arends, 1982; Charters & Pellegrin, 1972; Common, 1981; Fullan, 1991; Hord & Hall, 1987; Huberman & Miles, 1984; Lewis, 1988; Loucks & Zacchei, 1983; Loucks-Horsley & Roody, 1990; G. White, 1990).

The quality of innovation is also very important (R. Miller, 1970; Loucks & Zacchei, 1983; Wideen, in press). The literature warns that innovation should be based on successful practice (Huddle, 1987; Ornstein & Hunkins, 1988). It is illustrated that if teaming is part of the innovative effort, sophisticated forms of coordination and communication are required (Smith & Keith, 1971). Innovations with the goal of individualized instruction are cautioned by Smith and Keith (1971) about the "differentiated goals vs. differentiated means" debate (p. 333). Weick (1982) notes that open area classrooms are very "tightly coupled" (p. 673) and, as such, create visual and aural dependencies.

The uncertainty of implementation is inevitable, given the presence of unanticipated problems (Glickman, 1987; Huberman & Miles, 1984; Longo, 1983). These require effective feedback networks (McLaughlin, 1976) to prevent program blunting (Huberman & Miles, 1984; Smith & Keith, 1971).

Smith and Keith also note the "facade" that may exist in innovation; that is, the innovation takes on a "public face" that is different from what is actually occurring.

The literature clearly emphasizes the complexity of educational change. It is little wonder that implementing effective change is so difficult.



## **CHAPTER THREE**

### **METHOD**

The context of research is very important. For that reason, the first part of this chapter is dedicated to a description of the research district, school and specific site that forms the "bounded system" (Merriam, 1988) explored in this study. The next section describes the L.E.I.F. Program and the key players involved including the researcher since "the researcher is the primary instrument for data collection and analysis" (p. 19). Data collection procedures are then described in detail with attention paid to validity, reliability and generalizability and the last section is reserved for a description of the data analysis techniques employed in this study.

#### **Context of This Study**

##### **The District**

This study takes place within a small district in an urban setting. Parkview Secondary School is the only high school in the district, enrolling approximately fifteen hundred students from grades eight through twelve; there are nine elementary schools. The community of 45,000 served by the district is, in this researcher's perception, like a "small town in the metropolis" in that community members tend to be closely associated and rooted in their history.

### The School

In this researcher's experience, Parkview Secondary School has a history of unsuccessful innovations and it could be said that the cultural, structural and interpersonal linkages (Wilson & Corbett, 1983) are weak making this a loosely-coupled system (Weick, 1976) with no real shared goals, few rules to limit individual discretion and promote collective good, and few opportunities to discuss and observe instructional practice with colleagues. Teachers are largely classroom oriented and isolationist (LaRocque, 1986) and there are no apparent "norms of continuous improvement" (Little, 1982) in a majority of the staff. Anomalies associated with this school are that several teachers were former students of the school, perhaps contributing to a school culture which is resistant to change and somewhat rooted in the past; the leadership of the school has been unstable as indicated by the presence of four principals in the past six years; and the school had adopted a new and different timetable at the time of implementation of the L.E.I.F. Program. The spring of 1993 also brought the first teachers' strike in recent memory. It was in this context that the team of five educators created their own subunit ethos that embraced change and provided an environment where self-efficacy, levels of opportunity and capacity (McLaughlin & Yee, 1988) could be realized.

### **The L.E.I.F. Program**

The L.E.I.F. Program ("Learning Environment that is Integrated and Flexible") was a voluntary response on the part of five educators to the Ministry of Education's "Year 2000--Intermediate Program" (Year 2000: A Curriculum and Assessment Framework for the Future, 1989). Although the "Year 2000--Intermediate Program" was mandated change, there were no restrictions or recommendations given by the Ministry with regard to how the program should be implemented even though it was identified as a "Developmental Site." The only requirement was that the team provide the Ministry with a report by the end of December in the implementing year that included an account of how grant monies were used in the pre-implementation phase for release days for program development. Furthermore, the district did not impose implementation restrictions or guidelines other than those related to the availability of resources (that is, staffing, extent of facility renovations).

The program involves a "school within a school" concept housed in a facility renovated specifically for this purpose (see Figure 2, p. 172). Since the facility could not possibly accommodate every subject area, access to specialty areas of the school (for example, science labs, gymnasiums, computer labs) was obtained. The team of five educators delivered an integrated curriculum using a two-subject focus each quarter to a grade eight student population that ranged from 93 - 85 students (with attrition) throughout

the year. These students elected the program in the previous spring after extensive marketing by the team; there are about 250 grade eight students in total enrolled in the school. The schedule for 1992-1993 was as follows:

QUARTER ONE (September 8 - November 15)  
Science and Physical Education

QUARTER TWO (November 16 - January 29)  
Practical Arts Sampler (Clothing, Foods, Metalwork and Woodwork) and Math

QUARTER THREE (January 30 - April 6)  
Social Studies and the Fine Arts

QUARTER FOUR (April 7 - June 18)  
English and Language (choice of French or Language Sampler--Mandarin, Japanese and French)

These subjects were purposely paired together to allow for integrating opportunities and each team member coordinated the activities in the quarters of their expertise.

Since it is very difficult to find a team of five teachers who have expertise in all areas of the curriculum, arrangements were made with other staff members to "trade time" so that they could be brought into the program--this occurred in the case of metalwork, woodwork, Mandarin and Japanese. The team acknowledged the value of discrete learning and wanted integration activities to draw in the relationships between the disciplines to promote understanding and relevance. Examples of integrating activities in quarter three (lauded as the most successful quarter by the team in terms of

integration) included "Medieval Newscasts," a Roman banquet, an adaptation of Shakespeare's "Romeo and Juliet" designed to integrate the Fine Arts (Music, Art, Drama) in each project and also to reinforce the content learned through the Social Studies curriculum.

Integration activities in quarter one were facilitated through sessions entitled "Life Themes" where issues related to Science and Physical Education were discussed; for example, drug abuse, health and nutrition, fitness. In addition, a field trip to Camp Elphinstone was arranged early in the instructional year to allow students the opportunity to explore the forest resource and also participate in a variety of physical activities like nature walks. The native perspective of the forest resource was also explored through a presentation by the Sechelt Indian Band.

Quarter two integration activities were suspended by the team's own admission due to difficulties in accommodating the schedules of those teachers whose expertise had to be imported into the program, while in quarter four, integration took place in the Language Sampler where culture was studied in conjunction with language. English, however, was integrated and reinforced in the first and third quarters and studied as a distinct discipline in the fourth.

The students in the L.E.I.F. program were grouped in four classes with the composition of each class changing each quarter. Since there were five

teachers, this allowed one teacher to play a support-administrative role in each quarter or to provide the opportunity for two teachers to team in a classroom.

Another distinctive feature of this program (inherent in its name) lay in the flexibility of the timetable. Since the program operated in isolation from the school, the day could be arranged in any way convenient to the team. For example, if a guest speaker could only come at a certain time, the schedule could be arranged around that. It should be noted, however, that once the schedule was set for the quarter, it changed relatively infrequently so as to not confuse the students.

Goals of the L.E.I.F. Program included utilizing community speakers and resources (done with limited success since approximately ten speakers came throughout the year) and providing a learning environment supportive of individual learning needs. Meeting individual learning needs was largely done through after class tutorial time and the use of assistants in the classroom (usually in the form of the "floating" team member). Extension activities were offered and coordinated and were given to supplement class materials; however, they were seldom used by students. In an effort to meet individual learning rates and to promote success, mastery learning was implemented and refined as the year progressed. At its most refined stage, students who did not obtain at least 80 percent on their assessments were given the opportunity to do a retest provided they (1) attended a compulsory "after class" tutorial

session where the materials were taught again, (2) they attended an after class "rewrite" session and (3) they obtained at least 80 percent on a "pretest" usually consisting of five to ten questions. If they did not pass the pretest, arrangements would be made for the student to have another tutorial session and opportunity to do the "retest"; however, the onus was on the student to pursue this. Students were allowed only one retest; students who did not obtain 80 percent were given an "incomplete."

Additional goals of the program included an emphasis on well-articulated outcomes, importance on both the cognitive and affective domains and promotion of positive self-esteem.

### Key Players

The political dimension of this study cannot be overlooked; it is significant that all but one of the players remain employed in the district. As Guba and Lincoln (1981) point out:

It is undeniable that case studies are even more politically sensitive than typical evaluation reports. Because they are focused on particular units, because they provide a basis for tacit inferences, and because they can often be identified with the actual elements (subjects, settings, programs, and so on) being evaluated, so that it is difficult to maintain anonymity, case studies are more likely than other kinds of reports to upset political balances. (p. 378)

This political reality is a factor that must be accounted for in this study.

The sample for this case study consists of four educators who were members of the team of educators who implemented the L.E.I.F. Program and

two administrators who were instrumental to the program. The following is a profile of each individual:

Laurie--is thirty years old at the time of this study and has taught at Parkview Secondary School for six years. Laurie is married and has no children.

Leslie--has taught in the district for twenty-two years, the past several years have been at Parkview Secondary. Leslie is forty-three years old, is married with no children.

Lyn--is thirty-seven years old with four and one-half years teaching experience. Lyn is married and has two children.

Morgan--is forty-two years old and has taught in the district for most of twenty years of experience. The past several years have been at Parkview Secondary School. Morgan is the single parent of two children.

Sandy--has several years experience in the district as both teacher and administrator in a variety of schools. Sandy is fifty-two years old, is married and has grown children.

Sam--is forty-six years old and has spent most of twenty years experience in the district as both teacher and administrator. Sam is married with two grown children.



### The Researcher

The limitations that participant observation brings to case study analysis is outlined in chapter one. This cannot be neglected particularly since this researcher was a member of the team of educators that implemented the L.E.I.F. Program. Although there may be increased understanding of the problems associated with implementing educational innovation, there is always the risk of "going native" (Hammersley & Atkinson, 1983). This is acknowledged and is considered throughout this study.

It is important to note, however, that investigator biases and interpretations are a part of qualitative research:

In qualitative case study, the investigator is the primary source for gathering and analyzing data . . . the investigator as human instrument is limited by being human--that is, mistakes are made, opportunities are missed, personal biases interfere. Human instruments are as fallible as any other research instrument. (Merriam, p. 37)

As Hammersley and Atkinson (1983) point out:

The aim is not to gather 'pure' data that are free from potential bias. There is no such thing. Rather, the goal must be to discover the correct manner of interpreting whatever data we have. (p. 112)

The key to qualitative research is to be sensitive to the biases inherent in this type of research (Merriam, 1988).

The biases that this researcher brings to the study center around her close proximity to the case--there was a great deal of ownership in it since she was involved with the program from its inception. The problems faced by the

team were also the researcher's problems and, as a result, there is increased emotionality in knowing what it is like to be committed to a program that is not turning out as planned. The researcher knows first-hand what it is like to take a risk only to find that one's reputation may be at stake in the failure of that risk. Fortunately, case study research "is one of the few modes of scientific study that admit the subjective perception and biases of both participant and researcher into the research frame" (Goetz & LeCompte, 1984, p. 95).

The background that this researcher brings to the study is eight years teaching experience at the secondary level; seven of those years were spent at Parkview Secondary School teaching social studies, English and drama. Formal education includes a Bachelor of Education (Secondary), undergraduate courses in business administration and graduate courses in education administration. She is thirty-six years old and is married with one child.

### **Research Design**

#### **The Naturalistic Paradigm of Inquiry**

The naturalistic paradigm of inquiry expressed qualitatively is best suited to this study since the areas of interest lie in process and meaning of experiences rather than outcomes of products:

. . . qualitative researchers are interested in meaning--how people make sense of their lives, what they experience, how they interpret these experiences, how they structure their social worlds. It is assumed that meaning is embedded in people's experiences and mediated through the

investigator's own perceptions. A researcher cannot get 'outside' the phenomenon. (Merriam, 1988, p. 19)

As Hammersley and Atkinson (1983) point out:

The centrality of meaning also has the consequence that people's behaviour can only be understood in context. For this reason, 'natural' settings must be investigated: we cannot understand the social world by studying artificial simulations of it in experiments or interviews. To restrict the investigation of social behaviour to such settings is to discover only how people behave in experimental and interview situations. (p. 9)

The positivist paradigm of inquiry is based on the assumption that there is a single, objective reality which can be measured and observed (Merriam, 1988). "In contrast, qualitative research assumes that there are multiple realities--that the world is not an objective thing out there but is a function of personal interaction and perception. It is a highly subjective phenomenon in need of interpreting rather than measuring" (p. 17).

The Parkview Secondary School L.E.I.F. Program is such a phenomenon.

### The Case as the Unit of Analysis

Case study was chosen since the L.E.I.F. Program provided a "bounded system":

The case study seeks holistic description and explanation. As Yin (1984) observes, case study is a design particularly suited to situations where it is impossible to separate the phenomenon's variables from their context. (Merriam, p. 10)

Further, "when it is important to be responsive, to convey a holistic and dynamically rich account of an education program, case study is a tailor-made approach" (Kenny & Grotelueschen, 1980, as cited in Merriam, p. 30). It is the intent of this study to provide a "holistic and dynamically rich" account of the L.E.I.F. Program as a case on the implementation of educational innovation.

### **Limitations of Case Study Design**

Guba and Lincoln (1981) caution that case studies can "oversimplify or exaggerate a situation leading the reader to erroneous conclusions about the actual state of affairs" (p. 377). Part of the problem is that case studies "depend heavily on the interpretations of the writer and on his selection of the information to be presented" (p. 377). Another caution involves case studies which "are at best only partial accounts but give the impression of being the whole; that is, they tend to masquerade as a whole when in fact they are but a part--a slice of life" (p. 377).

Additional limitations which affect case studies but are not limited to this kind of research deal with the topic of ethics:

An unethical case writer could so select from among available data that virtually anything he wished could be illustrated. Such a selection might occur for an improper reason (for example, the evaluator allows himself to be used to whitewash a problem) or for reasons of ignorance, naivete on the evaluator's part. The evaluator may also indulge in rationalizations: he does not want to harm innocent people, he does not want to allow some negative results to swamp the positive

ones, and so on. While any inquiry can be 'shaped' by the evaluator, the case study is especially susceptible to such manipulation. (p. 378)

Another ethical issue is associated with the case being a "bounded" system; it may be possible for some to identify the site of the case study and thus the players in it. "Promises of anonymity are extremely difficult to keep" (p. 379) and the strain of trying to meet those promises may colour the data used or how it is written. The case study researcher must be aware of all these limitations.

### **Data Collection**

As mentioned in the overview in chapter one, this study is based on two data bases: (1) an existing data base initiated at the school level and (2) a data base collected specifically for this study.

#### **Existing Data Base**

The existing data base consists of quantitative data in the form of overall achievement results printed from each class list and qualitative data found largely from observation and documents outlining educational experiences, parent contacts, behaviour management strategies, mastery learning procedures and program goals and intent prior to implementation.

A horizontal survey (see Appendix B) was used to collect perceptual data. It was administered in May, 1993 in three separate ways: (1) the survey was mailed to the homes of the 85 students with the request parents/guardians respond and mail it directly to the team (2) the survey was

administered by one team member to all the student respondents on the same day with attention paid to consistency in directions (3) the team completed the survey at separate times as time permitted. Of the parents, 28 responded; all 5 team members responded; and 76 students responded. The survey response graph (Figure 1, p. 149) represents a weighted average of the responses for each survey question from separate respondent groups. It should also be noted that newspaper, magazine and newsletter articles form a part of the perception data used.

The purpose of the existing data base was to provide a basis of program evaluation for the team and, since it was not specifically designed for this study, it is only used to confirm the findings. The only exception to this will be the documents, particularly those outlining the program goals and intent, since they are of particular interest to this study.

### **The Case Study's Data Base**

The data for this study were collected four ways: (1) participant observations (that were nearly "complete" at times); (2) a daily "log" recorded by the researcher; (3) interviews with four team members and two administrators associated with the program; and (4) documents from the program.

### 1. Participant Observations

As indicated earlier, the researcher was a member of the team since the inception of the program. Total immersion in the program meant the research component played a second role to the implementation requirements of the program. There was no time for detailed accounts or notes on daily activities as they occurred. Instead, the researcher recorded a log at the end of each day. The unfortunate aspect of this was that there was a heavy reliance on memory of the day's events. Further, notes were made on pre-implementation difficulties. While the methods of recording observations were not ideal, they are still important. Merriam (1988) states that "participant observation is a major means of data in case study research. It gives a first hand account of the situation under study and, when combined with interviewing and document analysis, allows for a holistic interpretation of the phenomenon being investigated" (p. 102).

### 2. The Recorded Log

The researcher recorded on tape the most salient aspects (positive and mostly negative) of the day while driving home from school each evening. The log spanned a time frame from mid-October (1992) to late May (1993) when it was decided that the program would not be continued.

### 3. Interviews

Particular attention was paid to the Merton, Fiske and Kendall book, The Focused Interview (1990) in the structuring of the interviews. As Patton (1980) aptly points out, the purpose of the interview is "not to put things in someone else's mind (for example, the interviewer's perceived categories for organizing the world) but rather to access the perspective of the person being interviewed" (p. 196). This researcher found a fine balance between her initial conceptualization of this study, her closeness to the program through participation and the nature of the questions to be framed for the interviews (see Appendix C). As a result, particular pains were taken to ensure that the questions were as open-ended and retrospective (Merton et al., 1990) as possible. There is also a delicate line between maintaining the "focus" and not leading the interviewees. Further, attention was paid to the range, specificity and depth of the interviews (Merton et al.). In most cases, the interviewees chose to discuss the program in their own terms. While the researcher ensured that important topics from the initial conceptualization were approached, unexpected findings have emerged. Merriam (1988) states that "in most studies the researcher can combine all three types of interview so that some standardized information is obtained, some of the same open-ended questions are asked of all participants, and some time is spent in unstructured



mode so that fresh insights and new information can emerge" (p. 74). This happened in this study.

Furthermore, each interview was scheduled separately and took place in the facility which housed the L.E.I.F. Program (with the exception of one which took place at the researcher's home). Admittedly, the closeness of the interviewer to the interviewees may have had impact on some of the responses. Care was taken to record any observations in post-interview notes which included any necessary background information including events surrounding the interview or the informants themselves. It should also be noted that purposive sampling was used to identify the respondents making it appropriate that the sample consist of the team of educators (with the exception of the researcher who was also a team member) and two administrators directly and indirectly involved in various stages of implementation.

#### 4. Documents

"There is nothing to be gained, and much to be lost, by representing such a culture as if it were an essentially oral tradition" (Hammersley & Atkinson, 1983, p. 143). Documents are a valuable source of data. What makes them especially enticing is that "the investigator does not alter what is being studied by his or her presence" (Merriam, 1988, p. 108). The difficulty, however, in using documents lies in identifying origins, authors and

contexts; since this researcher authored many of the documents to be examined, this problem will be minimized substantially.

### Internal Validity

Ratcliffe (1983) made some important observations when he said "data do not speak for themselves; there is always an interpreter, or a translator . . . one cannot observe or measure a phenomenon/event without changing it . . . (and that numbers, equations, and words) are all abstract, symbolic representations of reality, but not reality itself" (as cited by Merriam, 1988, p. 167). The question remains, "to what extent can the researcher trust the findings of a qualitative case study?" (p. 166).

Since the data uncovered in qualitative research is open to interpretation, the aim is "not to find the 'correct' or 'true' interpretation of the facts, but rather to eliminate erroneous conclusions so that one is left with the best possible, the most compelling, interpretation" (Bromley, 1986, p. 38). The truth, in terms of reality itself, can never be grasped (Merriam, 1988). Therefore, "the case study worker constantly attempts to capture and portray the world as it appears to the people in it. In a sense for the case worker what seems to be true is more important than what is true" (Walker, 1980, as cited by Merriam, p. 167).

Another difficulty associated with internal validity and qualitative research lies in one of the basic assumptions operating within the research

framework; namely, that "reality" is "holistic, multi-dimensional and ever-changing; it is not a single, fixed, objective phenomenon waiting to be discovered, observed and measured" (Merriam, 1988, p. 167). In real terms this means that data collected on one day may differ from data collected from the same person on another day given the contextual and circumstantial events surrounding the collection of data. This is why this researcher made notes after each interview to point out the contextual and circumstantial elements that may have affected the interview.

Other strategies used to promote internal validity include triangulation since "the rationale for this strategy is that the flaws of one method are often strengths of another and by combining methods, the observer can achieve the best of each, while overcoming their unique deficiencies" (Denzin, 1970, p. 308). Member "checks" were also done; each interviewee received a copy of the interview transcript and was invited to make revisions, and copies of the draft findings were distributed to them prior to completion. Long-term observation, cited by Merriam as strategy to promote validity, was also the case in this study since the researcher was a participant throughout the whole implementation process. While the other players knew of the researcher's plans to use the site in a study, the specifics of the study were not revealed until late in the year since (1) they had not been clearly articulated until the spring of the year and (2) once they were articulated, the researcher did not

want her initial conceptualization to colour the responses of the participants. Finally, in an effort to promote validity, this researcher's biases have already been acknowledged.

### **Reliability**

To what degree can the findings of this study be replicated? This poses a problem for qualitative research methods in general because human behaviour is never static (Merriam, 1988). Guba and Lincoln (1981) prefer the term "consistency" and argue that

consistency, as an issue, need not be faced directly. Since it is impossible to have internal validity without reliability, a demonstration of internal validity amounts to a simultaneous demonstration of reliability. Hence, if the evaluator places emphasis on shoring up validity, reliability will follow. (p. 120)

Strategies used, however, in this case study to promote reliability include a statement of the researcher's position vis-a-vis the group, theories to be explored and biases present in this study, and a description of the social context of this study. Triangulation is another strategy promoting reliability that has been used as well as an "audit trail" (Merriam, 1988) on how the data base has been collected and analyzed.

### **External Validity (Generalizability)**

Simply put, external validity refers to the extent that the findings from one study can be applied to other situations. One can promote external validity by (1) providing rich, thick description "so that anyone else interested

in transferability has a base of information appropriate to the judgment"

(Lincoln & Guba, 1985, pp. 124-125) and (2) cross-site analysis:

By comparing sites or cases, one can establish the range of generality of a finding or explanation, and at the same time, pin down the conditions under which that finding will occur. (Miles & Huberman, 1984, p. 151)

It is important to note that it was a similar case (Smith & Keith, 1971) that formed the initial conceptualization of this study; therefore, this study is, in a sense, a cross-site analysis.

### **Data Analysis**

As noted, the Smith and Keith (1971) study is what inspired the initial conceptualization for this study. The categories, however, derived from this initial conceptualization were not conceived solely from this study; Fullan's book, The New Meaning of Educational Change (1991), and Huberman and Miles' book, Innovation Up Close: How School Improvement Works (1984) also had a significant role in this early conceptualization. The initial framework included doctrine clarity, program adoption, "personal fit," "organizational fit," innovative features, outcomes (intent vs. reality) and leadership in innovation. (The guiding questions surrounding each category are outlined in chapter one.) As Merriam (1988) points out, these initial conceptualizations are essential:

This is not to say that a researcher enters an investigation with a blank mind. As mentioned earlier, every researcher holds assumptions, concepts, or theory. Riley (1963, pp. 5-6) observes that the research

process begins with at least an 'organizing image of the phenomenon to be investigated' and 'the selection of facts and the searching for order among them is guided by some prior notions or theories about the nature of the social phenomenon under study.' Even in a comprehensive case study 'one cannot exhaust the description of a setting.' Therefore, 'there must always be selection criteria and these are derived, in part at least, from theoretical assumptions, from ideas about what produces what.' (Hammersley, Scarth, & Webb, 1985, as cited by Merriam, p. 60)

The impact, however, that the Smith study had cannot be underemphasized and this researcher was continually aware of the danger of imposing the Smith and Keith findings on this study since (1) she was a close participant in the program and (2) she perceived, in her own mind at least, that these findings were appropriate. The challenge lay in putting aside pre-conceptualizations to allow new conceptualizations to emerge. Glaser and Strauss (1967) caution:

Merely selecting data for a category that has been established by another theory tends to hinder the generation of new categories, because the major effort is not generation, but data selection. Also, emergent categories usually prove to be the most relevant and the best fitted to the data. (p. 37)

### Data Analysis Method

A qualitative design is emergent: One does not know whom to interview, what to ask, or where to look next without analyzing data as they are collected. Hunches, working hypotheses, and educated guesses direct the investigator's attention to certain data and then to refining and/or verifying one's hunches. The process of data collection is recursive and dynamic. (Merriam, 1988, p. 123)

Data analysis does not begin once all the data are in; rather it becomes more intensive (p. 123). The data analysis process began with the initial categories conceptualized for the study; namely, doctrine clarity, program adoption, personal fit, organizational fit, leadership in innovation, innovative features and outcomes. Large sheets of paper were put up on the wall for each category including a new category, "miscellaneous," in an effort to accommodate the data that would not fit into the pre-conceived categories. All interview responses were colour coded according to the respondent making identification quick and efficient; all documents and researcher observations were white (original documents were retained separately in binders and folders for easy reference). The responses were then read over several times and sorted into the broad categories according to the guiding questions articulated in chapter one. As Merriam (1988) points out:

At the outset of a qualitative case study the investigator knows what the problem is and has defined the case that will be studied in order to address the problem. But the researcher does not know what will be discovered, what or whom to concentrate on, or what the final analysis will be like. (p. 124)

Once the initial sorting was done, the data from each category was examined in detail and sub-categories were formed from recurring topic regularities in the data. The colour-coded interviews provided an efficient way of identifying if all respondents or just one or two individuals had something to say in a particular category. It was discovered that all interview respondents had

something to say under each broad category. Opposing views on a particular category were retained for more in-depth analysis.

Once the sub-categories had been established, all the data in that sub-category were read over several times and similar comments were put together. Comments that were different were put in a separate section under the same heading. All interview responses were accounted for and categorized in this study so that any new conceptualizations would not be lost.

In writing up the data, care was taken to include like samples of direct quotes from the data under each sub-category. Since there was, generally speaking, a significant sample to choose from, this was validation to the researcher that the categories worked well in the study. In the instances where the data samples did not fit with what was generally said by the other respondents, this was also included in the findings. It should also be noted that throughout the process, notes were made and possible recommendations were put in the miscellaneous category.

It is important to note that while this study confirms much of what is written in the literature on educational change, it is the synthesis of the findings, literature and experience that makes the L.E.I.F. Program case study significant.



## **CHAPTER FOUR**

### **FINDINGS FROM THE STUDY**

#### **Chapter Overview**

The findings from the study of the Parkview Secondary School L.E.I.F. Program are based on a variety of data including interviews, field notes in the form of a daily log recorded by this researcher, documents pertaining to the L.E.I.F. Program that include program statements and progress reports, survey results and the pre-implementation observations of this researcher. Further, in order to get a flavour for the social context of this study, newspaper, magazine and newsletter articles are also used as they relate to the "Year 2000" program in general (of which this study was a part) and the L.E.I.F. Program specifically.

The chapter is divided into seven headings: (1) Doctrine Clarity, (2) Program Adoption, (3) Personal Fit, (4) Organizational Fit, (5) Innovative Features, (6) Leadership in Innovations, and (7) Outcomes, since these are the overarching categories that have framed the conceptualization of this study. A variety of the above mentioned data are adduced under each heading to exemplify the findings of this study before an elaboration is offered regarding their significance.

## Doctrine Clarity

### The Social Context of the Innovative Doctrine

As noted in the review of the literature, where there is lack of agreement in society on the values implicit in innovative efforts, problems are created for the innovators as they fail to satisfy divergent opinions. The mandated "Year 2000" is no exception. If newspapers, magazines and newsletters are barometers of social opinion, then the following articles have much to tell:

Among many observations and recommendations, the Commission's original report said the ideal school system is one that is both 'loose' and 'tight'.

Loose in the sense that it offers better choice, greater diversity and more freedom for all individuals with the system. Tight as defined by clearer roles and responsibilities for those who are accountable, better communication (within the system, to parents and the public) and better control.

The Year 2000 has been controversial since its beginning and it seems the arguments have been over 'loose' and 'tight'.

Critics want a tighter system with more testing, clearer reporting to parents, definite consequences for failing standards and someone held accountable when there is higher failure.

Staunch supporters want to throw out the worksheets and measuring by marks and make school one big hands-on learning experience with innovative teaching and child-driven learning.

What we actually have is a compromise--a system that's somewhere in the middle between tight and loose. (The Coquitlam, Port Coquitlam, Port Moody NOW, November 21, 1993, Editorial, p. 8)

At the heart of the "tight-loose" debate lie the values associated with assessment, learner-focussed instruction and the concept of time as it relates to learning. The following articles are taken from the fall of 1993 after Premier

Mike Harcourt, reacting to the results of a Decima poll on education done in the spring of the year, announced that the "Year 2000" was not working and would have to be revised. Columnist Vaughn Palmer reports the Premier as saying:

'To put it bluntly, the report card is in on the Year 2000 and it's failed the grade,' he said. 'There are going to have to be some quite substantive changes.' (The Vancouver SUN, Wednesday, September 8, 1993, p. A14)

One area for revision would be in assessment and reporting as Keith Baldrey and Susan Balcom report:

'One of the biggest complaints out there is the lack of accountability for the parents,' Harcourt said. 'The new report cards are not working. Parents want to be told if their child can read or write and not necessarily whether that child gets along well with his peers or is developing good social skills. They want hard information about how well they're doing.' (The Vancouver SUN, Wednesday, September 8, 1993, p. A3)

Columnist Vaughn Palmer adds:

The premier, as the father of a high school student, shared many of the public concerns about the controversial reforms in education. Was it necessary for the schools to abandon grades, standards and testing? Why mix up courses of study and children from different age groups? And why are report cards reading like the output from a 'feel good about yourself' session at some encounter group? (The Vancouver SUN, Wednesday, September 8, 1993, p. A14)

At the height of this debate, however, representatives from the B.C.

Confederation of Parent Advisory Councils came to the defense of the "Year 2000" program. Reporter Susan Balcom quotes parent Norine Roth:

When I read the report cards my daughter received, I knew exactly where she was. I actually had a better idea than when she came home with letter grades. (The Vancouver SUN, Wednesday, September 9, 1993, p. B1)

With regard to the learner-focussed, child-centered controversy, Tom Fennell's article from Maclean's magazine in January of 1993 has this to say:

Oddly, much of the discontent centres on one of the innovations that many educators hail as a breakthrough--the now widely followed theory of child-centered education, a system that encourages students to progress at their own rate. Critics contend that because the child-centered system does not impose clear standards, it has become unaccountable and is producing near illiterates. (Maclean's, January 11, 1993, p. 28)

In a subsequent article specifically on the "Year 2000," Hal Quinn reports:

Psychologist James Steiger of the University of British Columbia in Vancouver, who sat on a university committee that studied the Year 2000 program, also opposes the abandonment of grading. Steiger said that the noncompetitive atmosphere will make it easier for students to graduate, but it will not prepare them for the future. (Maclean's, January 11, 1993, p. 38)

Proponents of learner focussed instruction argue, however, that the above

interpretations are misleading. James Sherrill, Associate Dean of the

University of British Columbia's Education Faculty explains:

The public's perception is that the curriculum is not only focussed on the learner, but is created, designed, selected and dictated by the learner. These perceptions may have formed because of these statements in a recent version of the Graduation Program: 'all students design a program of learning leading to (lifelong learning) goals,' 'Students can plan studies based on personal goals and interests . . .,' and 'Each learner designs a pathway to graduation that is consistent with her/his interests, abilities and aspirations.' However, these statements were not meant to imply that individual students would have

total control over his or her studies. (UBC Education, Winter 1993, p. 4)

Another area of controversy in the "Year 2000" lies in the concept of time. Individual progress, inherent in the program, means that students can progress at their own rate resulting in multi-age classrooms. In his report to Premier Mike Harcourt, Education Minister Art Charbonneau makes the following revision apparently in reaction to the perceived lack of accountability in the "Year 2000":

Starting next year, students in intermediate and senior grades will be expected to complete a clearly defined curriculum. If they don't succeed, they can fail a course, or an entire grade. (Vancouver SUN, Wednesday, November 17, 1993, p. B1)

Further, Premier Harcourt, as cited by Vaughn Palmer, also makes references to "clearly delineated classes" (Vancouver SUN, Wednesday, September 8, 1993, p. A14).

While most of these examples are taken from articles written after the demise of the L.E.I.F. program, they do reflect the same conflict and controversy that laid the backdrop for the Parkview Secondary School L.E.I.F. Program. It would appear that many of the issues came to the fore once the mandated "Year 2000" was "cut adrift" by the same government that had "endorsed" it months prior. It is important to note that due to space limitations in this component of the study, not all controversies surrounding the "Year 2000" are listed. What is listed, however, gives the reader a

flavour of the controversy and uncertainty that permeated the Developmental Sites, one of which was the Parkview Secondary School L.E.I.F. Program. It is important too to note that the mandated "Year 2000" Program was revised before it was fully implemented--although the Primary Program component is in place, the Intermediate and Graduation levels have not been fully implemented. One could argue that the "Year 2000" was doomed to failure even before it was put to the test through implementation because of the values conflicts inherent in the program. Once again, Cuban's (1990) statement comes to mind:

Values conflicts, then, are not problems to be solved by the miracles of a science of schooling; they are dilemmas that require political negotiation and compromises among policymakers and interest groups--much like that which occurs in the larger society. There is no solution; there are only political tradeoffs. (p. 8)

To educators, like those found in the L.E.I.F. Program, this realization can promote skepticism about the endurance of mandated changes like the "Year 2000."

### Conceptual Clarity of the Innovation

Similar to the notion of competing social values implicit in innovations is the notion of internal difficulties in the specific programs designed around the "Year 2000." For example, consider the following program statements associated with the L.E.I.F. Program:

The learning process and curriculum content are of equal importance.  
(Belief Statements, p. 1)

and

The 'whole' child should be educated; this includes both the cognitive and affective domains. (Belief Statements, p. 1)

The difficulty with these statements is apparent when one discovers that teaching the process of learning and emphasizing the affective domain takes instructional time away from curriculum content. Since the curriculum is so content oriented, one would risk not covering all the curriculum in order to attain these values. The reality of the situation was that with the pressure brought to bear by parents and departments within the school to "cover" the curriculum, these beliefs were impossible to attain in the allotted time, unless the expectations of parents and colleagues were to be ignored all together, and, the team was more adept at identifying the critical learnings of each curriculum area (some of which were subject areas they had never taught before).

Closely associated with the demands placed by curriculum content is the idea of individual progress:

We will emphasize the importance of individual progress of students and provide instruction which is relevant to the real world and the whole person. (Initial program pamphlet, April, 1991, p. 1)

and

The second aspect of our program which is inherent in our name is 'flexible.' This means that we will have the flexibility within our own timetable to meet the needs of each individual learner. (Update for Staff, June 1992, p. 1)

Once again, however, the reality was that in order to meet the demands of the curriculum, accommodation of individual learning rates had to be done outside the timetable during tutorials and retests that frequently lasted well beyond normal school hours.

Another aspect of the program statements that proved to be easier said than done is related to subject integration:

We are striving for an integrated curriculum through a thematic, holistic approach that still maintains the integrity of the individual subjects. (The Proposal, Second Submission, p. 1)

and

We are taking every step necessary to ensure that our subject linkages are valid, significant and lend themselves to our ability as educators to cover the prescribed grade eight curriculum. (Learning Environment that is Integrated and Flexible, April, 1992, p. 1)

The inherent problem here lies in personal definitions of "integrity"; to some, integrity means covering the critical learnings of the subject while, to others, it means covering all of the prescribed curriculum. As noted in the above examples, the program does not make a clear distinction either.

Another area of inconsistency in the program statements is illustrated in the following statements:

The student team will be a heterogeneous grouping of 100 grade 8 students working with a team of teachers. . . Any student who expresses interest will be accepted. (Welcome to L.E.I.F., April 1992, p. 1)



The second statement reflected the concern that not enough students would elect the L.E.I.F. program since it was an option to the regular program. The significance of this inconsistency, however, was not to be recognized until it was determined early in the school year that by taking all applicants in order to attain the numbers necessary to keep the program operational, the result was anything but a heterogeneous group of students.

A further difficulty found in some of the initial program documents is that they tend to be quite abstract and general. In the interview process, two of the six respondents use the term "theoretical" to describe the conceptualization of the program:

I think we were scrambling a lot. I think we realized how ill prepared we were. I mean there was still a lot of theory, a lot of ideals, a lot of how we wanted it to be and the transition from idea to practicality, to putting it into day to day work, there still was a lot to be done. (Interview with Laurie, July 7, 1993, p. 11)

Pre-implementation was very theoretical and philosophical with 'isn't this neat' and 'wouldn't it be wonderful.' We could have concurrently or at some stage along that theoretical journey taken a look at, 'okay, what is this going to look like?' and picture - have this idea of where we're going to be, what is it going to look like, try to examine all of the ins and outs, which I never even thought of. (Interview with Sam, July 8, 1993, p. 3)

Another complication lay in personal understanding of the "theoretical" statements. For Lyn, a newcomer to the program, this posed particular problems:

I didn't have time to fully get involved in researching mastery learning for instance. I had to really pick up on what people were telling me on

a day to day basis and I'm sure I know even now mastery learning on a fairly simplistic level because I really just haven't had the time to sit down and read the literature or find out how it was implemented in other schools where it was successful. I came in late and was pretty busy through the year being involved with the bare bones. (Interview with Lyn, June 24, 1993, p. 10)

Lyn observes that there were differences among the team as to their understanding of the theoretical components of the program:

It was also clear that there were some primary players in as far as the conception of the L.E.I.F. Program and they were the most aware of, you know, what their goals and intent were. And then the other people were perhaps not quite as, I don't know if I would say knowledgeable, but not quite as involved in the whole ideals behind the program but they were there and fully supporting what was happening but perhaps not having put quite the time and energy into researching what it was that we wanted to actually implement, the theory behind it. (Interview with Lyn, June 24, 1993, p. 11)

Conceptual clarity of the innovation was complicated, therefore, by inconsistencies in the program statements themselves, and in the personal meaning attributed to the somewhat abstract descriptions. Further, the documents, in addition to being quite abstract, were also written in such a way as to "sell" the program since that was the purpose of many of the documents, particularly the pamphlets intended for the parents of the target students. All of this resulted in frustration that the program could not deliver all that it had sold. (This topic is elaborated in greater detail in later sections of this chapter.)

The difficulties associated with attaining conceptual clarity cannot be underestimated. In the interim report to the Ministry of Education in December, 1992, the team notes:

However, it is important to note that it is considerably more difficult to attain concept clarity for an innovation which is developed from the 'ground up' than one which is prescriptive. (Interim Report to the Ministry of Education, December 9, 1992, p. 1)

This calls to mind another aspect of conceptual clarity that complicates implementation--that of the latitude given for adaptations to the innovation.

### Latitude for Adaptations

Although the L.E.I.F. Program was a developmental site for the "Year 2000" Program, it is important to note that much latitude was given to the team in program design and implementation by the ministry, district and the school. The result was that many changes were made in the course of the first months of implementation that changed the original goals of the program. The researcher's daily log reports the following entries:

We have been talking about getting rid of the afternoon large group closure--it has been too stressful and we haven't been able to make the students feel positive about being part of the group. (Log, October 14, 1992, p. 4)

We are not teaching in the way we want to because of our clients--it is difficult to try something new with a difficult group like this . . . What we are doing is not really different except mastery learning. (Log, October 28, 1992, p. 6)

The principal said maybe we should reduce our expectations. I said even mastery is a tremendous thing in itself. Blunting? Yes, that is

what we are doing. When pushed, you blunt. (Log, November 3, 1992, p. 7)

We are cutting ground every step of the way. We were under the wrong assumption from the beginning of the year that we would be able to handle the administrative things ourselves in this 'mini-school'--we should have gone to the school based team sooner with some of these students with major problems . . . It's all we can do to offer the course that is there--Math 8 course is too condensed on a quarter system. We can't establish critical learnings because we have never taught it before . . . There is nothing special about our program except mastery and now that will be jeopardized because we have to trade time to bring in two new teachers who know nothing about it. (Log, November 18, 1992, p. 10)

We have employed a lot of coping strategies that have made us revert back to the familiar. (Log, November 30, 1992, p. 13)

We wanted to do so many neat things--this is not how we imagined it would be. (Log, December 3, 1992, p. 14)

We are so content oriented because we don't know these subject areas well enough. (Log, December 4, 1992, p. 14)

We would like to work more on the affective domain, yet, at the expense of content? (Log, January 28, 1993, p. 20)

The principal said our program may not be viable as it is when we spoke of next year--he mentioned perhaps a 60 percent version. (Log, February 22, 1993, p. 24)

From the above entries, it is apparent that one response to the unanticipated problems that inevitably come up during implementation is to adapt the program to a more traditional form. A hypothesis follows that the more the original program goals and statements are couched in difficulties stemming from internal inconsistencies and abstract terminology, and where there is high latitude for adaptations, the easier it is for there to be program blunting when

implementation problems arise. If, on the other hand, there is a clear idea of the desired goals articulated through program statements that are internally consistent and as concrete as possible (perhaps through a smaller scale innovation--this is discussed later), then there may be a greater likelihood that responses to unanticipated problems during implementation will result in adaptations designed to strengthen the program design rather than blunt it. The question then may be not whether adaptations should or should not be allowed, but whether program goals are defined well enough to determine if "opportunistic adaptations" (Huberman & Miles, 1984) are being made or not. Certainly, the L.E.I.F. Program is an example of the program blunting that can be done when program goals are not clearly defined at the outset.

### **Program Adoption**

#### **The Planning Stage--Process for Proceeding**

The data for this section are divided into two parts: the pre-implementation and implementation stage.

#### **The Pre-implementation Stage**

Notes made by this researcher during the pre-implementation phase state that "a lot of time was needed initially to discuss philosophical issues and beliefs . . . the nitty gritty was not done until the last couple of months" (Pre-implementation field notes, pp. 1-2). Since this was a program designed by the team, establishing a process for proceeding proved to be difficult:

Once program direction was established, it was difficult to coordinate the team's efforts to effectively put the plan into place. After a 'fair bit of floundering,' a strategy was finally devised which involved dividing the team into subcommittees in order to make the most effective use of time . . . The team would recommend that anyone attempting a project such as this consider this earlier in the developmental process. (Interim Report to the Ministry, December 9, 1992, p. 3)

Developing the program, devising the implementation plan and marketing it proved to be very draining:

The team found program development and marketing to be very demanding on top of full time teaching duties--it seemed that the team was very involved in the school already in a variety of capacities from school and district committees to extra-curricular activities. (Interim Report to the Ministry, December 9, 1992, p. 2)

Although the team had received monies from the Ministry for "release days" for planning (on average, about ten days each), the pre-implementation notes state that "the release days were difficult because they were hard on our classes; further, we still had all the work of preparing for substitute teachers" (p. 2). Over and above these release days, there were countless afternoon meetings and evenings at home working on the conceptualization and corresponding details of the program. The challenge of the pre-implementation planning stage is noted:

In addition, the challenge of setting up an entirely new teaching space and having to equip it with everything from desks and chairs to thumb tacks cannot be underestimated--it was a major task! (Interim Report to the Ministry, December 9, 1992, p. 3)

The pre-implementation phase was fraught with problems. The notes indicate communication difficulties:

Communicating what the program is about has been very difficult because (1) there is no precedent in our school therefore no frame of reference, (2) there is so little time to explain, (3) we are educating parents as well as explaining what we are about. There are so many misconceptions and they are difficult to manage - especially when you are dealing with nine different elementary schools. (Pre-implementation notes, p. 1)

The notes indicate rumours about the program being "airy fairy" and for "slow learners" (p. 1). In addition, it is noted that "student cliques were convincing other cliques that the L.E.I.F. Program was not cool" (p. 1) and in other instances, "parents wanted the program while their son/daughter did not" (p. 1). Through all of this, however, the L.E.I.F. Program was able to get enough students for year one of implementation.

### The Implementation Stage

The interviews tell much about how inadequate the planning for implementation had really been:

As far as ready for implementation, I don't think the group actually knew what the implementation phase was all about. Primarily because the first two years didn't actually get to the point of implementation and possibly that is something that we should have spent a larger amount of time on. (Interview with Sam, July 8, 1993, p. 2)

You know, we talked about philosophies of programs and similarities of maybe programs that were going on but I think we needed to say, 'okay, well, what do you do come Monday morning' and get down to the real hands-on - what it is that had to get done because I think those were the things that were really difficult. The ideas are wonderful.

It's just taking the idea and putting it into something that's going to work. (Interview with Laurie, July 7, 1993, p. 13)

I didn't really appreciate how much was involved in each of the ideas in implementing them. So, it wasn't until actually getting into the program and starting to implement it that I saw how much was involved in each of those things and therefore how much time it would take, how much energy it would take. (Interview with Lyn, June 24, 1993, p. 4)

Notes from the daily log also note:

We have been largely muddling through in a basic direction--how to get there is difficult because the specifics are shaky. (November 30, 1992, p. 13)

Part of the difficulty in adequately planning may have been the result of the complexity of the whole implementation process:

When I think about it, we were like a business--we had to plan the program, we had to get the personnel, we had to do the physical layout of the program, we had to get all of the equipment, we had to deal with the clients, we had to do the marketing, we had to sell the product--we were responsible for doing everything in starting a business. There wasn't one thing we didn't do, from packaging it, to selling it, to doing it . . . When I think back to it, it's incredible what we did without really any help from anybody. (Interview with Leslie, June 29, 1993, pp. 17-18)

Added to this complexity was the controversy over resources:

I think what happened was when we were given our developmental site grant for the program from the Ministry, people thought that we had all this money for our program when really that money was allotted for us to get the program started last year, for our days off to work on the program. And when things got started in the fall we were so busy that we never really talked about budget and we weren't really given much of one. And some departments got a little upset that we'd go and ask to borrow things when they thought, 'well, you've got a budget, you've got developmental site money, why don't you buy those things.' And it took a long time to get the staff informed that, no, we didn't have



much of a budget at all and that we had to go around begging for things. (Interview with Leslie, June 29, 1993, p. 17)

Not long after implementation began, the team realized that it would have been easier to "phase in" the program:

We need to focus in on a couple of areas at a time. (Log, October 16, 1992, p. 4)

It blows me away how ill prepared we were--we should have phased in this program. (Log, November 3, 1992, p. 7)

Really it was something we had to think of implementing over a number of years. (Interview with Lyn, June 24, 1993, p. 4)

Since the changes that we have envisioned for our program are multifaceted, we must recognize that we can't do everything at once. Therefore, we have consciously decided to focus on one or two things at a time within a reasonable time frame. In retrospect, the start-up of our program would have been much easier had we done this from the outset. (Interim Report to the Ministry, December 9, 1992, p. 5)

In addition to phasing in the program, other areas for improving the implementation process are noted in the log:

So many unknown variables must be sorted out before we could even contemplate doing this again--more administrative support, an equitable operating budget, department status within the school, mechanism for attracting a heterogeneous group of students, and the same level of assistance as the rest of the school. (Log, February 11, 1993, p. 22)

We must stay positive and celebrate our accomplishments. (Log, November 4, 1992, p. 8)

As demanding and difficult as it was just dealing with the implementation process, plans still had to be made about marketing the program for the following year:

We need to address articulation and devise a marketing plan, but there is so little time to do that--so little energy left. (Log, February 23, 1993, p. 26)

Furthermore, the team made a voluntary commitment to evaluate the program and this would not only take time but courage:

The survey for staff, parents and students is really just part of the implementation process--we are in the process of implementation and we are putting our money where our mouths are to find out how well we are doing. I must admit, the thought has occurred, 'what if we are crucified' but we want to grow and improve--it is a matter of attitude. (Log, February 23, 1993, p. 26)

The process for proceeding in both the pre-implementation and implementation phase was very complex and challenging.

### Motives for Adoption

What is it that motivates educators to engage in the complexity of change? All of the team members cite problem-solving as a motive for adopting the L.E.I.F. program:

Hearing about the vision of this middle school really excited me. I thought it would be a lot of fun to do and I was dealing with problem kids that drop out and there was nothing for them. They needed a smaller group placement than trying to manage seven subjects in seven different classrooms and we were going to have a two subject focus with the integration. And for the kids that I dealt with, this was ideal . . . for the kids that were coming up I thought it would certainly help out. (Interview with Leslie, June 29, 1993, p. 2)

And that was of interest to me to integrate strands of the curriculum to relate them to each other so they became more relevant. That was the key and that was an interest to me as far as motivation went . . . So that was the key and then the concept of flexibility because we had our own little program we could sort of adapt the timetable to the way we wanted and if something came up, we could adapt and change as we

wished. So we had more flexibility, hopefully, than the regular school. (Interview with Lyn, June 24, 1993, p. 1)

I just thought that it was going to be a really dynamic experience, you know, and to really do what I wanted to do as a teacher, you know, to make a difference with the kids and to have an opportunity to have the flexibility that I didn't think the old way of doing things had. And to get to what mattered, what really mattered, what was important to learn, what was important, what was relevant, I guess, really. (Interview with Laurie, July 7, 1993, p. 2)

What we saw was a need for grade eight students--a lot of the grade eight students were coming to the high school and weren't able to cope--they were taking eight courses and in each of those courses was a set block of things that needed to be learned, a set curriculum and a different teacher for all of these. And nothing seemed to be threaded through; there didn't seem to be anything in common--students would just see things in parts. I felt my life didn't work that way--things weren't in little cubicles . . . And I thought that if we would integrate subject matter so that students would be able to see that there was a purpose in learning, that what they did in Science also was relevant to Home Ec. and P.E.--that these subjects really weren't so different . . . We felt that there was too much time spent on the curriculum, on curricular activities, and not enough on the child, the individual. (Interview with Morgan, June 30, 1993, pp. 1-2)

While different team members place emphasis on different aspects of the L.E.I.F. program, it is apparent that problem-solving motives were there. It is interesting to note, however, that this was not the only motive mentioned.

Professional growth was also an important motive:

And for me, I was looking forward to having students that would have a range of abilities--some that we could have challenges with, academically. (Interview with Leslie, June 29, 1993, p. 1)

I was looking for something else to help me grow professionally. Although I had a specialty, I had other interests. Teaching is what I like and it didn't really matter what it was that I was teaching. This opportunity allowed me to be involved with people that had other

expertise and that I could learn from . . . I can remember Joe (vice-principal) asking me, you know, and 'why do you want to do this?' And I said, 'well, if I really want to be selfish about it I would be stupid not to involve myself with the types of people that were already there.' I mean they were outstanding teachers and people that I really respected and I knew that I would learn a lot from that. (Interview with Laurie, July 7, 1993, p. 2)

It is almost as if I'm a little more selfish now--I'm more interested in my own professional development. (Pre-implementation interview with Morgan, July, 1992, p. 1)

No respondents mention career goals or the grant money as motives for adoption. It would appear that the team was sincere in their intent to provide a better educational experience for their students and that professional growth was a reward for the expenditure of effort.

Closely associated with motives for adoption comes belief and commitment to the program. It has been noted that innovators can sometimes resemble "true believers" who are on a crusade (Hoffer, 1951; Smith & Keith, 1971). In the L.E.I.F. program, there was some evidence of this:

In the beginning it was almost altruistic--we believed this was better and the other way was artificial. (Pre-implementation interview with Morgan, July, 1992, p. 1)

I felt the excitement was quite infectious . . . I had become caught up in the idealism of what could be done and doing something different, being on the vanguard of the cutting edge. (Interview with Lyn, June 24, 1993, p. 2)

I liked the idea of it, the full concept of attaining mastery as opposed to mediocrity seemed good in the fact that you were able to take retests--it was a simple concept and quite radical as far as the school system is concerned even though in real life you get as many chances as you want to pass your driver's licence and you have to get at least 80

percent or more to get your licence. So, although it was actually similar to real life, it still seemed quite a revolutionary idea to me. One that's somewhat heretical as far as a lot of teachers are concerned. It seems almost like cheating or something. Ya, so I was quite excited about that. (Interview with Lyn, June 24, 1993, pp. 6-7)

As Smith and Keith (1971) point out, "it is both the remedial effort with its extraordinary intents and the accompanying zeal and enthusiasm that help define the role of the crusader" (p. 101).

Even more remarkable is the persistence of belief in the program despite obstacles and difficulties:

The criticisms from parents and students are hard to take, but I still believe that we are headed in the right direction. We can't put this much effort into something to not have something good come out of it. (Log, October 5, 1992, p. 1)

Throughout the implementation year, the log makes reference to "next year" even though the first year was incredibly rough. Despite all of the difficulties, belief in the program was still alive:

Morgan and I were talking after school today and we still believe in what we are doing--it's just that the proper implementation variables are not in place. (Log, November 26, 1992, p. 13)

Despite the difficulties, I am still positive about the program and it is unrealistic to expect anyone to implement a program in only one year. (Log, February 3, 1993, p. 21)

We still get excited about the program and see many more possibilities than a year ago. (Log, February 12, 1993, p. 22)

When asked during the year end interviews if she would implement a program like this again, Morgan had this to say:

Oh yes. O yes. I'd do it differently of course, but my dream is for the district somewhere, sometime to say, 'here's a school, you staff it.' You know, like, 'here's a school and you take these six teachers or these seven teachers and here's an administrator who would like to run this school with these seven people, and you do the L.E.I.F. Program.' (Interview with Morgan, June 30, 1993, pp. 9-10)

Other interviewees, during the year end interviews, had this to say in response to whether they still believed in the program:

Oh, definitely. I think it will come again. I think the middle schools will come up, like the grade 7, 8, and 9 which we originally planned, that, I think, will come. (Interview with Leslie, June 29, 1993, p. 30)

Yes. (Interview with Lyn, June 24, 1993, p. 7)

Definitely. (Interview with Sandy, July 5, 1993, p. 12)

Totally. I do not think it's dead at all. I mean how can you argue against motherhood and apple pie, or parenthood and apple pie? You can't. There's not one aspect about it that you can sit there and say it was wrong, or is wrong as far as the philosophy and the theory. The practice . . . there's nothing wrong with the practice either. There was nothing wrong with any of it. (Interview with Sam, July 8, 1993, p. 5)

I do, ya. I do. (Interview with Laurie, July 7, 1993, p. 7)

All respondents continued to believe in the program even though it faced insurmountable difficulties and would not be continuing. An interesting and significant finding from this study is that the team appeared to have "blind ownership" in the program, since, as the findings will show, the team placed blame for lack of success on the implementing variables and not on the internal integrity of the program. Smith, Kleine, Prunty and Dwyer (1986) have pointed out that if experience and rationale follow intuitions, then

"'positive' knowledge about practical action seems a little less than positive" (p. 141). If this is the case, how "positive" should the team have been about this program?

### **Personal Fit**

#### **Personal Orientation Toward Change**

What is it that gives educators the confidence to embrace the risk of change? Perhaps the following excerpt provides some answers:

A volunteer team of five teachers conceptualized and planned this program, and this has contributed greatly to their commitment to this program. It could be said that they have embraced a 'norm of continuous improvement' and have committed themselves to daily problem solving in an effort to effect meaningful change. The collegial nature of the team has been a tremendous benefit (primarily in the planning stages when there was more time to meet) in that it simultaneously provided the necessary support and pressure to see this project through to implementation. (Interim Report to the Ministry, December 9, 1992, pp. 1-2)

Further, a study of the change process during the pre-implementation stage notes the following:

The team feels they have or can attain the knowledge and skills necessary to implement change. (Change document, p. 5)

The team was confident that they could effect meaningful change. It is interesting to note, however, that there is evidence that this initial efficacy can be lost as the innovation faces difficulties:

Morgan said that if someone came to evaluate her teaching she would have failed. It is as if everything that has served us well as educators and made us successful is forgotten. You try a new program and you

lose who you are and where you came from. (Log, November 18, 1992, p. 10)

You lose a sense of who you are when you are put into a new situation. Sam said it is like information overload--you are out of your normal routine and that throws you off. (Log, November 26, 1992, p. 13)

Everything about who I am is being attacked right now. (Log, December 14, 1992, p. 16)

I am sometimes fearful of falling flat on my face and destroying the reputation I have worked so hard to achieve. (Log, December 2, 1992, p. 14)

By February, the team began to realize they did not have to continue with the innovation if they chose not to:

I used to equate quitting with failure but now I realize that people know how hard we have worked. I have realized for the first time that not doing this next year is an option afterall. (Log, February 11, 1993, p. 22)

An important realization I have come up with is that I no longer equate my personal success with this single endeavour. (Log, February 18, 1993, p. 24)

I detect a change in attitude in the team now that we have discovered the option of not doing the program next year--it has taken some pressure off us. (Log, February 16, p. 23)

Somehow, the team felt better knowing that they now had the option to not do the program the following year. An important distinction must be made here, however, in that the team had not decided to abandon the program; rather, they realized that non-continuance was a reasonable option in that implementing context and that they need not lose "face" in choosing that option. It was as if the efficacy that had been lost initially because of



implementing difficulties was restored in the realization that the L.E.I.F. Program was a good program, but perhaps not suited to the capacity of Parkview Secondary School to implement it.

### **Personal Readiness--Requisite Skills and Knowledge**

An innovation of the scale of the L.E.I.F. Program can be very demanding in terms of the requisite skills and knowledge required for implementation:

I'd say that not all of you had those strategies you were going to use already in your repertoire. You didn't have them consolidated yet . . . I guess one of the simplest ways to put it is you're trying to build skills for yourself, a strategy that you use automatically and there are many, many of them. You're also trying to make these same strategies and skills part of the students' repertoire of methods and learning and ways they go about learning. And we sometimes forget that that in itself is a learning process and if you're trying to take on too much, the curriculum itself suffers because there's a tremendous amount of time used. (Interview with Sandy, July 5, 1993, pp. 4-5)

In addition, the strain of teaching in new subject areas while implementing an innovation is significant:

There was pressure in having to teach things you hadn't taught before and to go through the curriculum for the first time and that's quite stressful at times. Make up tests, make up quizzes, ya, so it was basically like teaching the first year again. First year teaching. (Interview with Lyn, June 24, 1993, p. 23)

It was a big challenge to me. I was quite interested and I learned a lot and I really enjoyed teaching the different areas. But again, that's an added stress and added challenge. At the same time you're dealing with the behaviour stuff, you're dealing with a whole new curriculum which you've never taught before and have, in some cases, no training to teach. But it was interesting because I enjoyed learning it and it was

a daily learning experience for me teaching it. (Interview with Lyn, June 24, 1993, p. 6)

There is the constant stress of teaching in new subject areas with very difficult students . . . We are not math teachers and yet we are giving a "master lesson" for the Video Journal of Education. This is difficult since teaching in unfamiliar content areas is like being a first year teacher. (Log, December 2, 1992, p. 14)

I underestimated the Science preparation and marking. (Log, October 5, 1992, p. 1)

My dafnia fleas died on me! (Log, October 13, 1992, p. 3)

Lack of confidence in content area has its manifestation in reduced innovativeness:

We are so content oriented because we don't know these subject areas well enough to be creative. (Log, December 4, 1992, p. 14)

The general view was that the innovative qualities of the program would improve the following year when there was a better understanding of the entire grade eight curriculum:

Next year we will be closer to where we want to be. (Log, October 28, 1992, p. 7)

Re-doing these subjects will be easier next year. (Log, October 29, 1992, p. 7)

It is also interesting to note that the team was so burdened with the implementation process that they were not able to adequately continue researching aspects of the program in an effort to improve quality:

We identified specific areas each one of us will research and report back to the group. Lyn took reporting procedures; Morgan and Leslie took student led conferencing; Laurie took 'Control Theory' and I took

mastery learning and the 'Instructional Process.' (Log, October 16, 1992, p. 4)

None of these reports were completed with the exception of a report card procedure presented by Lyn. Although the intention was to improve practice through further research and it was acknowledged that this was definitely necessary, the demands of implementation made this unrealistic. This underscores the importance of having sustained assistance during implementation so that time and added resources can be allocated to continued research. Further, it would have been helpful if some of these resources were used to bring in the expertise of others to provide feedback on the team's practice. What happened, however, was that the team had no time for research and received no feedback on their practice. "Skill" acquisition and "knowledge" was largely based on intuition during the implementation stage.

### Scope of the Change

The L.E.I.F. Program is generally acknowledged as ambitious change:

In terms of individual readiness, the team recognized that the innovation was a complex one involving a major departure from their usual teaching situation. They were going from relatively isolated and autonomous professionals to a team approach where consultation and collaboration would be essential. In addition, unfamiliar teaching situations (team teaching, different curriculum areas etc.) would be taken on - all within an entirely different timetable. (Interim Report to the Ministry, December 9, 1992, p. 3)

We would classify our program as ambitious since it involves changes in roles, teaching strategies, and organizational structure. (Interim Report to the Ministry, December 9, 1992, p. 4)

The problems that come with large scale innovations are significant:

The whole undertaking was of such a large size that I think it was really difficult to sort of see the whole thing . . . the step by step procedure. (Interview with Laurie, July 7, 1993, p. 11)

It is difficult doing everything at once. We must remind ourselves that we are in the implementation process and that we can't do everything at once. (Log, October 15, 1992, p. 4)

I am supposed to be teacher, counsellor, administrator and everything. (Log, November 17, 1992, p. 10)

You totally took on too much. We know that. So you were trying to be mother, father, disciplinarian, teacher, counsellor, which was our original intent. (Interview with Sam, July 8, 1993, p. 21)

I feel overwhelmed and defeated--every time you turn around there is a crisis. (Log, November 18, 1992, p. 10)

Morgan says that teaching is number fifteen on the list of things to do. (Log, February 18, 1993, p. 24)

Role overload was evident as the team struggled to manage all of the components of a multi-faceted innovation. Further, the L.E.I.F. Program turned out to be uncongenial to both intended practice and previous classroom experience. For Morgan, this was problematic:

In my background there is no set curriculum - everything is your curriculum. And so for me this year, to teach specific, you know, here we start with math and we're going to do page one and page two in a sequential manner, that's very difficult for me, especially in math because I don't do it that way. If we're doing math, we do money, and when we're doing money, we learn about the banking system, and to learn the banking system you have to know decimals and fractions and everything works to that theme. So for me, math was probably the hardest because it was so very traditional and the furthest away from where we wanted or I wanted to be with the program. (Interview with Morgan, June 30, 1993, p. 4)

We have some severe behavioural problems and I feel like a real witch--I'm a different person. (Log, October 6, 1992, p. 2)

I have found myself being quite authoritarian which is against my usual style. But you give these kids an inch and they take a mile. I am caught in between the kind of teacher that I know works best for me and the kind of teacher these difficult kids demand. (Log, January 13, 1993, p. 17)

It is exhausting dealing with grade eights all day long. (Log, October 29, 1992, p. 7)

Leslie said that she is at the point of being rude to a parent (something very contrary to her character). The parent is very demanding and doesn't see that her child has benefitted the most from mastery learning. (Log, April 23, 1993, p. 38)

The scope of the L.E.I.F. program resulted in role overload and the stress from being a different kind of educator than was intended or previously experienced.

In response to whether too much change was taken on at once, Laurie had this to say:

Too much at once, ya . . . I think again you can't make change that quickly. You have to slowly bring things into process. So maybe, yes, a slower implementation of changes and a lot more preparation beforehand. (Interview with Laurie, July 7, 1993, p. 18)

Yes, I would say that it was too ambitious. (Interview with Sam, July 8, 1993, p. 7)

An interesting finding emerges from the data: had the L.E.I.F. Program embraced change on a smaller scale, then there may have been correspondingly fewer problems and a reduced sense of role overload, thereby making the program more congenial to intended practice.

### Cost-Benefit Analysis

It is unlikely that anyone would embrace change if they felt that the costs would exceed the benefits. In the L.E.I.F. Program, however, the costs were initially underestimated:

. . . it was estimated that the benefits (expressed in student outcomes) would exceed the cost. In retrospect, the team believes that they underestimated the costs of taking on this initiative in terms of personal sacrifice and exhaustion. (Interim Report to the Ministry, December 9, 1992, p. 3)

The personal costs attributed to the program are well documented in the data:

The exhaustion from implementing an ambitious program like ours is taking its toll on us. (Interim Report to the Ministry, December 9, 1992, p. 5)

The amount of work. The amount of work. And the sacrifices of health and family life. . . . (Interview with Morgan, June 30, 1993, p. B2)

It was really tiring . . . so it's been a very stressful year. (Interview with Lyn, June 24, 1993, p. 28)

I'm getting to the age where there're more important things in life--I think we gave and gave and gave without enough in return personally. I mean as a teacher I think you give and give and give but I think now, at this stage in my life, after having given that much and spending the time that I did, I didn't get enough out of it. Satisfaction. I can't say how many nights I went home feeling that, 'Yes, I feel like I got something accomplished.' There weren't that many days. (Interview with Leslie, June 29, 1993, pp. 5-6)

You know, I certainly worked harder than I've ever worked and had nothing really said or appreciated. I always say a little appreciation goes a long way . . . I can't believe how positive we were able to stay and the things we kept trying to do and, 'well, let's try and do this, let's try and do that,' even right to the bitter end. With the type of response that we got, there was no appreciation for what we were

trying to do, really, when it came down to it. Very few people appreciated the time, the effort, the energy, everything that we were giving. (Interview with Laurie, July 7, 1993, p. 18)

I don't think any one of us could have worked any harder than we did. We certainly gave up family, friends, everything and devoted ourselves. Even our health, at times, I think, was jeopardized. I just don't think you could have asked more from a group of teachers. (Interview with Laurie, July 7, 1993, p. 4)

I think you exhausted yourselves. The team was so exhausted at the end of the year and you were running out of fight. . . . (Interview with Sandy, July 5, 1993, p. 10)

I feel tired and disorganized. (Log, October 8, 1993, p. 3)

We're exhausted. Pro-D day and we still didn't even have time for lunch. (Log, October 16, 1993, p. 4)

I feel guilty about being a neglectful mother. (Log, October 23, 1992, p. 6)

I feel like everything else is passing me by--what is happening in the rest of the school? . . . I put so much energy into my job and it seems the harder I try, the less I succeed . . . I look longingly at my old position--I was good at what I did. (Log, November 4, 1992, p. 8)

I estimate that I have 12-14 hours of work for this weekend just to be ready to do report cards. (Log, November 6, 1992, p. 9)

I am worried about Morgan who is very ill . . . Lyn looked totally defeated after a phone call from a very vindictive parent. (Log, December 3, 1992, p. 14)

If we weren't trying so hard it might be easier to accept all the criticism . . . the cost-benefit doesn't pan out. (Log, February 10, 1993, p. 21)

There is a consensus among the team that we receive little if any job satisfaction. (Log, January 12, 1993, p. 22)

We're on strike but I still put in a full day of work. (Log, March 3, 1993, p. 28)

Teaching is not bad--it's all the other stuff--one crisis after another. (Log, March 22, 1993, p. 31)

Leslie said that we are so used to being abused that we don't recognize we are abused anymore. We are so used to saying, 'I'm sorry, I'll try better' that we don't recognize that we are the ones that have been violated. (Log, May 3, 1993, p. 41)

The above is only a sampling of the comments to be found with regard to the costs associated with the L.E.I.F. Program. It is important to note, too, that one of the team members, Laurie, left the program at the end of April due to stress and ill health. The price to be paid for involvement in the L.E.I.F. Program was, at times, very high.

This is not to say the L.E.I.F. Program was without benefits:

The report card results were gratifying--almost all of our students attained mastery. (Log, November 16, 1992, p. 9)

There is opportunity for growth--no pain, no gain. We are certainly stretched and uncomfortable, but we are growing professionally. (Log, November 26, 1992, p. 13)

The professional growth afforded to us through the whole process of planning and implementing this program has been extremely rewarding. Even though we are finding program implementation very difficult, we know that what we are learning in the process will make us better educators. (Interim Report to the Ministry, December 9, 1992, p. 4)

I'm glad that I had the opportunity to be involved in it, something new and different and as I mentioned before, it's changed me and I think a number of other people. It has some sort of lingering legacy. (Interview with Lyn, June 24, 1993, p. 28)



I think we've left our mark . . . I think that the education in the high school has--there are people who know that things can be done differently. (Interview with Morgan, June 30, 1993, p. B2)

How much actual impact the L.E.I.F. Program had on the school would be difficult to measure; however, one cannot deny that it was a tremendous learning experience for the team even if the costs to the individual members often exceeded the benefits.

### **Organizational Fit**

#### **Structural Linkages**

The L.E.I.F. Program design was that of a "school within a school" and, as such, it operated as a subsystem within the school organization. In some respects, this worked well:

I think what we wanted to do was to have our "little school within the school" for the academics and the integration of our curriculum. But, other than that, at lunch time and after school, we wanted our students to be directly involved with the school. We wanted them out of our room and involved in all school activities. And we certainly made sure that we went to all the assemblies that, if there was anything--clubs day or whatever--the students knew about it . . . We tried to follow the same rules as the school. Actually we did. When exams were on, we followed the exam timetable, we didn't let our kids out any earlier . . . we followed the rules of the school . . . so they had the best of both worlds. They had their own little school within a school plus they were involved in the school. (Interview with Leslie, June 29, 1993, p. 27)

It would appear, however, that while creating a subsystem worked to a point, many problems existed with this organizational structure. The data indicate that lack of status within the school was one difficulty:

It was as if we weren't even part of the school or that we didn't exist, I felt. For a lot of it, we weren't even part of the structure of departments . . . You have to have a place in the hierarchy. You have to know where you fit in that hierarchy. If it is a department structure, where are you in that department structure? Do you have a department head, or if you don't, who do you link to? When you're teaching science, it needs to be stated how much the science department is responsible for your program. (Interview with Morgan, June 30, 1993, p. B5)

Somehow we were not designated as a department or we thought we were designated as a department and weren't. And we should have been invited to the department head meetings and so on . . . Also, because we were doing all the subjects, we figured that we could draw upon the different departments for the funding we needed, whereas in actual fact, teachers and department heads didn't understand that we needed money and that we didn't have our own budget and they thought that we had all sorts of money which we didn't have. So, again, there's a lot of misunderstanding, a lot of miscommunication and trying to beg money out of people. That was quite difficult. (Interview with Laurie, July 7, 1993, p. 9)

People look at us as an add-on but we aren't--we're part of this school and are entitled to just as much as anyone else. (Log, February 16, 1993, p. 23)

There is evidence that this led to feelings of isolation:

We are 'stragglers,' off on our own. (Log, February 22, 1993, p. 25)

As a staff of teachers, we became quite isolated from the staff because of our commitments. We just didn't have the time. We were very rarely able to get out and socialize with the staff or even find out what was going on. (Interview with Leslie, June 29, 1993, p. 27)

At staff meetings I feel so out of it. I feel so isolated within this program. I don't know what's happening in the school. (Log, December 2, 1993, p. 14)

Another difficulty associated with the subsystem structure came from the perception of other staff members that it was a "favoured" teaching situation:

I think they thought we were being treated specially, in a special manner, that we were getting special privileges. It was to our disadvantage that we weren't available to be talking to staff on a regular basis, weekly basis or whatever. Perceptions are made, unfortunately, because communication is not being made . . . so I think there was a bit of resentment on their part, and that's unfortunate. I think it's just more for lack of communication. We just didn't have the time. We just didn't have the time to do that. (Interview with Laurie, July 7, 1993, p. 4)

The first couple of months I thought the school was rather negative in saying that we were, quote, the 'chosen' teachers, that we had, quote, 'this wonderful class size ratio.' As more teachers became involved, like the I.E. teachers and the language teachers . . . they knew what kind of kids we were dealing with and they knew we weren't the chosen few. (Interview with Leslie, June 29, 1993, p. 25)

There is the misconception that we are richly staffed out there but we have a difficult composition of students. It is all we can do just to manage. (Log, October 13, 1993, p. 3)

They thought that we had, you know, that we were overstaffed for the number of students that we had. I think also that the money that had been spent on the facility--I guess figures are running around about that. Just the extra attention that initially the administration gave to us. What else? Also the school board was supportive of what we were doing and, you know, everybody wants to be treated the same and nobody wants to be treated differently or be given something extra special and I guess some people get nervous when things like this happen. (Interview with Laurie, July 7, 1993, p. 5)

. . . I think there was probably a certain amount of resentment on the part of administration in this building and on the part of teachers in this building when resources were allocated to modify and adapt these rooms for your use. (Interview with Sandy, July 5, 1993, p. 7)

Further, a subsystem organization like the L.E.I.F. Program creates difficulty since it competes with the permanent organization:

I mean even the option for the L.E.I.F. Program as presented to this year's incoming grade 8s was an extra piece of paper. It wasn't part of the package showing an option within this school. It was like, 'if you don't want to come to the regular school, you can go here,' like it was a different school. (Interview with Sandy, July 5, 1993, p. 9)

What happened is you have this divisive situation where you were running an innovation along with a traditional program and you ended up with all of your suspicions, your elicitation, your threatening, your et cetera, the internal problems . . . I've always thought that if all grade 8s were going to do this, then there would be no problem. None at all. And then it would be able to go on to the next grade 8s. It could have been looked at as the alternate articulation, but what ended up happening is because it was a choice item, you had your natural difference of opinions from teachers, you had your difference of opinions from colleagues, you had the system beating the system because it's innovative and it's running against the tradition. There's competition. It never works. It never works. It never has . . . Try to run an innovation along side a traditional one at the same time. It won't last. Open area along side the traditional classroom. Where are they now? (Interview with Sam, July 8, 1993, pp. 32-33).

Sometimes this competition led to communication difficulties with other departments in the school, particularly the elective areas since the L.E.I.F. Program offered "sampler" courses in the practical arts (woodwork, metalwork, clothing and foods) and languages (French, Japanese and Mandarin):

I think that there was a lot of resentment in that they thought we were taking students away and that they were going to have to teach other courses. . . . (Interview with Laurie, July 7, 1993, p. 10)

I.E. is concerned about enrollment being down and that they will have to teach in other subject areas and their programs will suffer. (Log, October 16, 1993, p. 4)

We felt that it was a benefit that we exposed all our students to all the electives and next year I'm certain the students who never would have gone into woodworking or metalwork will go into it . . . so that they will benefit next year by having larger classes. (Interview with Leslie, June 29, 1993, p. 24)

They were also concerned that maybe we weren't qualified to teach the course and from my situation when I taught home economics, I certainly did whatever I could to inform myself and went in to watch the department head do a class so that I could do it the way that they wanted it done. (Interview with Laurie, July 7, 1993, p. 10)

Some of these concerns led to the team having to "trade time" with colleagues in woodwork, metalwork, Mandarin and Japanese in an effort to minimize conflict with the departments and also because it was beneficial to "buy" the competence of colleagues in these specialty areas. The "trade off," however, was lack of consistency with the team effort.

The academic departments also had some difficulty with the L.E.I.F.

Program:

Actually, in the math department some of the people did express to me a bit of concern. They weren't sure about mastery learning and what it involved and were concerned that the kids were getting multiple attempts at the same test until they got their 80 percent and was it fair to their kids who got one shot at a test. So a bit of concern there and I think largely because they weren't really sure about what we were doing. (Interview with Lyn, June 24, 1993, p. 8)

Some departments were more supportive than others:

There were some that came and were very much a part of what we were doing or were very supportive. Unfortunately, they were few. (Interview with Laurie, July 7, 1993, p. 5)

Some of the department heads couldn't have done more for us than they did. They were great. (Interview with Leslie, June 29, 1993, p. 25)

Creating a subsystem within the permanent system will create difficulties that must be resolved in the linkages between the two systems; particularly when it comes to establishing the status and nature of the relationship of the subsystem to the permanent system.

Another area of difficulty for a subsystem like the L.E.I.F. Program is in linkages with the larger system--the district. Especially when you rely on this larger system to provide you with clients for your innovative program:

In addition, because the targets were in nine separate elementary schools, there was the constant struggle of trying to communicate the features of the program and quell the inevitable misconceptions at the same time. (Interim Report to the Ministry, December 9, 1992, p. 3)

The L.E.I.F. Program intent was to have a heterogeneous grouping of students; yet, the prevailing interpretation was that it was a program for students with learning difficulties:

I don't know how we could have been more succinct. But obviously our message wasn't getting to people about what the program was about, or what we were about. I don't know how we could have done it better, but there were still teachers who thought that we were almost an alternate school. That if you can't manage in my class in grade 7 then you'd better go to the L.E.I.F. Program. And that wasn't it at all. We were an alternative, but not an alternate school. (Interview with Morgan, June 30, 1993, p. B9)

I think we tried really hard to communicate what it was all about but it seemed to not get across. For some reason it was perceived as a 'dummy' program or a program for kids with difficulties. It was not a program suited for, unfortunately, gifted and talented or normal kids which was not the case at all. (Interview with Laurie, July 7, 1993, p. 5)

I'm rather disappointed that they (grade 7 teachers) really didn't know what the program was about. Although we went around, we talked it up, they really weren't listening . . . Some of them thought it was an unstructured program. I think they thought it was rather helter-skelter and that kids were allowed to do whatever they wanted. And I think they got that impression even before the program started. And then after they sort of forgot about it and really didn't think more about it. And when it came time this year for articulation, all of a sudden they didn't know very much about the program and sort of wondered why they weren't told, when they had been . . . somehow, it just seems they weren't that interested. (Interview with Leslie, June 29, 1993, p. 26)

I think of the misinformation given out by the grade 7 teachers. And I don't think many of them had an accurate picture of the program . . . the majority of your kids were kids that had had various forms of student service support, behaviour problems, academic problems, whatever . . . But, because of your clientele the perception became that this was some form of alternate school . . . I was speaking to a parent who told me that his daughter was going into the regular program and I asked, 'why?', and he said, 'because the child's teacher said that she is a good academic, a fully functioning student who will do just fine in the regular program.' So even among those teachers who you perceived to be on-side, they did not have an accurate picture of what this program was designed to be or what it could be. (Interview with Sandy, July 5, 1993, p. 10)

It was very difficult for the team to find the time to market the program for the second year of implementation and to quell these misconceptions:

We have found it very difficult to actively market our program as it should be (given that it is a grade eight option) in an effort to recruit participants for next year. Our program is currently in jeopardy because we haven't had the opportunity to effectively market it. This requires the time and energy which we do not possess at this time. In

addition, we haven't been able to effectively communicate our program goals and intent with the elementary schools in the district.  
(Presentation to the Board of School Trustees, May 11, 1993)

But still there seemed to be a fair amount of ignorance out there about the fact that it was there or what was involved in the program and I think that was one of the big factors involved in the fact that the program didn't go next year, the fact that it wasn't marketed to the extent it needed to be in the elementary schools to get it up and going. But we just didn't have the time or energy to do that. (Interview with Lyn, June 24, 1993, p. 12)

The L.E.I.F. team experienced great difficulty in managing the information linkages in the district.

Another area of difficulty for a subsystem is found in establishing the "many intangible and agreed-on ways of doing things" (Smith & Keith, p. 86).

One problem area was in linking the L.E.I.F. Program grading system with the school system:

Report cards became a pain because we were using a different grading system. And it became hard because with mastery learning you received an 'I' if you got 79 percent or less and you did not complete the course until you achieved mastery. And then we graded from B-, B, B+ to A-, A, A+ and so on from 79 percent up. Obviously this was quite different from the traditional C-, C, C+ the rest of the school was using. So when it came to actually inputting report cards into the computer system for students' report cards, it became a bit of a pain as soon as students knew what was happening and they said, 'well, this doesn't mean an 'I', it means a 'C'.' You know, and they kept referring to the old system and so that was difficult. And we also did a lot of handwriting. We did a lot of anecdotal type reports. And we used a computer program that was quite helpful so that when parents and students got report cards they could see exactly what they got on particular assignments or tests and what was missing and so on . . . That's not what the rest of the school did or, generally speaking, the rest of them did. A lot of work though. A lot of work to put together all of that and again just the difficulties of transferring mastery



marks to normal marks and the relevance of the marks and so on. (Interview with Laurie, July 7, 1993, p. 28)

Another problem was that our report cards did not fit in with the regular system. So I guess that was another inconvenience. I think the counsellors were having difficulty if someone needed to have the marks brought up on the computer because our marks didn't fit the bubble sheets so we didn't do them and they weren't going into the computer. And because they didn't have ours, they'd have to go to their files to look up our report cards that were a little more in-depth and had more anecdotal comments. So that would be an inconvenience, our reporting system. (Interview with Leslie, June 29, 1993, p. 20)

How can we bubble our report cards when our marks distribution is different? Mastery learning doesn't fit in with the school system. (Log, November 16, 1992, p. 9)

Why can't we just record a percent instead of a letter grade on the computer sheets? (Log, December 15, 1992, p. 16)

We want to give the results for each of the four components of the practical arts but the school can't do this--our systems don't coincide--we will have to give them one 'homeskills' mark--that name is not ours, either. (Log, January 26, 1993, p. 19)

Computer attendance "bubble sheets" were also a problem:

It has been difficult adjusting fixed attendance bubble sheets to flexible class structures. (Presentation to the Board of School Trustees, May 11, 1993)

We didn't fit the printing out of attendance sheets. With computers one would think that that would have been very simple--that every two weeks you could change the class lists on the bubble sheets . . . We were thwarted in our flexibility. And in the end, I didn't even have attendance sheets for my last quarter. One would think that that shouldn't have been something that we needed to worry about. (Interview with Morgan, June 30, 1993, p. B5)

We were chastised for not doing our attendance sheets consistently but how can we do them when we can't even get proper class lists? (Log, November 16, 1992, p. 9)

Further, the goal of allowing continuous progress in mathematics for some of the more advanced students was prohibited by the school:

They said there was no room for these students--further evidence of how the present system can't accommodate the 'Year 2000' notion of continuous progress. We're cutting the pavement--things will have to change if we are really serious about all this 'Year 2000' stuff. (Log, January 27, 1993, p. 19)

In summary, it was very difficult for the team to establish the structural linkages between their subsystem and the larger, more permanent system found in the school and the district.

### Cultural Linkages

Perhaps one way to examine the cultural context of the L.E.I.F.

Program is by examining some interpretations of the reactions of others to its presence in the school:

I think the school thought it was just another one of those programs trying to get off. I don't think a lot of people took us seriously. A lot of people were so wrapped up in what they were doing and had no idea what was going on, although there was certainly an awful lot of material published about the program so the staff was well informed . . . But when it did get off, I think a lot of people said, 'Well, what's this all about?,' because they never stopped to read what was put in their boxes. It wasn't important to them. It only got important to them when all of a sudden it was going to affect them--it was going to take away maybe one of their teaching courses. That they would have to do something else because we were going to be doing all our own subjects. And, I think, if it was going to hit them personally, all of a sudden they said, 'Well, we weren't informed about this,' when everyone was informed about it. (Interview with Leslie, June 29, 1993, p. 24)

One is reminded of Weick's (1976) "loosely coupled" system description and Herriott and Firestone's (1984) "logic of confidence"--in a loosely coupled system it is often assumed that one member will not intrude on another member's territory (or department, in this case), even if the objective is for improved student outcomes. The team's failure to recognize that others did not place the same value and utility on the new program led to frustration:

And because you were so keen on what you were doing, sometimes you assume that the bystanders have the same knowledge base or awareness or the same picture in their mind of where you're going and what you're trying to do and don't quite recognize that some of these bystanders will be just that and become detractors. (Interview with Sandy, July 5, 1993, p. 23)

Sandy relates some of the comments that he heard from the "detractors":

I've heard comments such as, 'Boy, wait until next year when some of those L.E.I.F. kids have to step into a real classroom and get some structure.' (Interview with Sandy, July 5, 1993, p. 11)

The perception among colleagues, shall we say, was that this was just going to be an airy fairy, floaty type thing and with no accountability for the students. And that was a rumour. (Interview with Sandy, July 5, 1993, pp. 1-2)

Some insights are offered as to why some individuals might react this way:

The fact that you were trying something different, something which was advocated through the 'Year 2000' through some of the recommendations from the Sullivan Commission Report, sent a message of change in the winds to people and that's always a threat to their self satisfied sense of well being. And so any time people are faced with change, they will shoot at the knee cap of people promoting that change. (Interview with Sandy, July 5, 1993, p. 2)

I think that any group that wants to involve themselves with change, the group that do not like change, suspect them. And they will play

around with their motives of 'why are they doing this, what brownie points are they going to end up getting?' . . . So people would look at, you know, what's their motive. So you'd get these suspicious people and they'd say anyone wanting to involve themselves with change or hard work instead of using the system as they go, 'well, what's in it for them?', because that's the way THEY think . . . They're suspicious because the 'in-group,' the 'elitist' group is working hard and achieving well and they're trying to do a good job. So they wonder what the heck they're doing it for and they'll come up with things like, 'Oh, they just want to be administrative mouth pieces or they just want to end up in a position of power or influence' . . . And they totally misconstrue the motives of the individual . . . And they don't see that we don't have these motives. So other people in this group, when they brand somebody as elitist, are branding them elitist based on their personal motives. (Interview with Sam, July 8, 1993, pp. 10-11)

Sam goes on to an important insight on individual efficacy:

The 'sucky' part comes from 'What are you talking about? They care? They're trying to do a good job? They spend maybe three more hours a day on their job than I do on mine? What sucks!' What does this really say? What they're really saying is that from their motive base they've gone through a system and have come up with, they don't realize this, they've come up with a belief system in themselves that you don't try to excel. You don't give of yourself to do a good job. You don't have any control in the quality of your own work life. 'They' will do it to you. So if you start to try to do something for yourself or to your enterprise, you must be a suck. People who feel empowered to change the system are suspect, threatened and branded elitist by those that will not do that . . . their notion is 'Well, I have no control, it's all done to me' and they whine and complain because they don't get anything they want but they do nothing about it. (Interview with Sam, July 8, 1993, pp. 12-13)

As Sam points out, "Risk taking is valued by those who take risks themselves"

(Interview with Sam, July 8, 1993, p. 16).

The literature notes that a school culture conducive to change is one where 'norms of collaboration' are prevalent (Little, 1982). Lyn seems to indicate that this is more difficult in a larger school:

The school I was at before was, I guess it was about two-thirds to three-quarters the size of this school. But the physical plant wasn't nearly as big. There seemed to be a lot more communication between teachers. The staff was smaller and so there was more feeling of communication and, you know, you sat down for lunch with each other often and did more things with each other and that was positive from the point of view of communication, facilitating communication amongst staff. I haven't really enjoyed the fact that it's so big here and people seem to be too busy and there doesn't seem to be that many places where people can actually connect with each other. (Interview with Lyn, June 24, 1993, p. 22)

For the team, the lack of communication among staff was, at times, problematic:

A lot of bad feelings and misunderstandings could be clarified right at the outset if staff members would only come to us first to find out the real story before they report about it to someone else. Really it's only simple protocol, simple ethics, really. (Log, May 5, 1993, p. 42)

Since "norms of collaboration" (Little, 1982) were not present in the school, the team spent energy creating their own "ethos":

Since the team of teachers were volunteers and developed the program themselves, they created a very positive subunit ethos. Therefore, the environment for this innovation could be described as very receptive. (Interim Report to the Ministry, December 9, 1992, p. 1)

It was easy to overlook the difficulty, however, of linking this "positive subunit" with the permanent system found in the school and the district.

It is important, too, to note school climate and its influence on the L.E.I.F. Program. Some felt that the school embraced too much change at once:

I guess another large aspect was the timetable that our school had gone through. The new timetable was a huge undertaking in itself and I think in hindsight that doing a new grade 8 program as well as the new timetable was probably more than the administration should have taken on in one year. (Interview with Laurie, July 7, 1993, pp. 16-17)

Maybe there were too many changes in the school that were going on at one time. I know we talked about that. (Interview with Morgan, June 30, 1993, p. B4)

There is the realization that we are not only dealing with L.E.I.F. but a new timetable as well--the rest of the school is having a difficult enough time just dealing with the new timetable and here we have this whole added dimension as well. (Log, November 27, 1992, p. 13)

Further, the data indicate the strain of "job-action":

We had an afternoon study session and a day strike--this is stressful. I'm so busy, I haven't had time to closely examine the issues around the strike. (Log, February 16, 1993, p. 22)

Parents pop in uninvited to see us during job action when we are not supposed to meet with them. (Log, February 4, 1993, p. 21)

We are tied to the adverse strike situation--we would have had an open house by now, but we can't. We can't send home report cards. Parents will blame us. Negative atmosphere permeating the whole district is impacting our program. (Log, March 24, 1993, p. 32)

The team also found dealing with the trial of a colleague at this time very draining:

It's a strike day and I'm going to the trial. (Log, February 26, 1993, p. 27)

This study has demonstrated that the cultural context for the L.E.I.F. Program contributed to stress and anxiety for the team.

### Constituent Linkages

The two constituent groups that are significant to the L.E.I.F. Program are (1) the students and (2) the parents. While the community was to be another significant group as outlined in program goals, the lack of data suggest that it did not play an active role.

### The Students

The findings tell much about the learning needs of the students:

We had eight SLD kids, one EMH kid and two ESL kids in the beginning--some had one on one assistance in the elementary that came up and we didn't even have an assistant. We got all our documentation together to see if we could get an assistant and at that time we were told there was just no money. We went to support services and luckily we were able to be given half a day assistance. We were also given a teacher to help half a morning in science but it wasn't like we had them assigned to us all the time. It was whatever was left over. That was another stress that was added. It was that, you know, 'If we have anything left over you'll get it' which was really unfair . . . we did have smaller class sizes . . . and tried to separate the kids so that there were no more than two in a class. The only problem was that we had the other severe behaviour problems along with these SLD, EMH and ESL kids. These kids didn't seem to be the worst problem. It was the behaviour problem kids. (Interview with Leslie, June 29, 1993, pp. 20-22)

The clients consist of ninety grade eight students with very diverse learning needs. Since the program was presented as an alternative to the regular grade eight program, it is suspected that many parents chose this option with the hope that these needs would be addressed. The pressure of accommodating these diverse learning needs has been the team's greatest challenge and is one that continues to be explored

through correctives and extensions. (Interim Report to the Ministry, December 9, 1992, p. 2)

We ended up with a lot of very needy children, a lot of children demanding a lot of extra attention, a lot of extra attention, almost to the point of one on one which we weren't able to do all the time, obviously. (Interview with Laurie, July 7, 1993, p. 3)

The data also have much to say about the behaviour of the students:

Behaviour management was very tiring, having to deal with difficult behaviour problems virtually every day and to some extent most of every day . . . And at break times, basically we mostly spent our time trying to get the students out of the classroom or breaking up fights or dealing with crises or complaints. That type of thing. So it was very tiring. (Interview with Lyn, June 24, 1993, p. 23)

So I guess the biggest thing that happened this year was the group that you have a really hard time with was bigger than I had ever had to deal with before and probably more difficult to get along with than I had encountered before . . . making it more difficult to have time and energy for the kids that were good or lay in the middle ground. More time was taken up dealing with discipline and behaviour management with the kids that were a problem. (Interview with Lyn, June 24, 1993, p. 18)

We have established a behavior management strategy which involves contracts and parent interviews in an effort to emphasize responsibility and consequences, not punishment. But this has been very time-consuming, since we have a proportionally large number of students with tremendous behavioural needs. (Presentation to the Board of School Trustees, May 11, 1993)

There is some evidence in the data, however, that these tremendous learning and behavioural needs were not an adequate excuse for the team's difficulties:

It's a cop out. We've all had that before in various classes from hell. What do you do? What I do is end up surviving and come up with techniques that are going to better help my job and the quality of the learning life with the kids . . . And we get better and we get bags of tricks. I think in the L.E.I.F. Program everybody had their little bags



of tricks but nobody was sharing and making one bag . . . Instead, and I may be totally wrong on this one, but I've put myself in that role, I can see myself doing it, 'Oh, well, gee, look at the kids--I mean, you know.' It's avoidance in a sense and its natural. I'd do exactly the same thing because there was so much to do. And because there was not the planning and the expectation that this might occur. . . .  
(Interview with Sam, July 8, 1993, p. 22)

It's a cop out because the group (team) was so ambitious. In the first place, they said they were going to deal with all those problems themselves rather than take a look at what was already in place in the school for those kids. So we ended up with kids, still under wing, ended up with kids coming that had one on one support the year before to no one on one support, just you, your team . . . If it had been anticipated, if it hadn't been so ambitious, maybe that would have been dealt with, and, as you very well know, in year two that was going to be the very first thing that came up . . . 'We need assistance here.'  
(Interview with Sam, July 8, 1993, p. 26)

Sam observes that the team used the students' tremendous behavioural and learning needs as an excuse when really the ambitiousness of the program was to blame.

The importance of fitting the innovation with the kinds of students in the program, however, cannot be underestimated:

Many of the students came from very traditional classrooms where it was the teacher in front of the room. Maybe there'd be a little bit of experimentation, or some cooperative learning, but basically they were still very traditional classrooms. What we were proposing was something very unconventional, very different, and I think that they were just not ready yet for that. (Interview with Morgan, June 30, 1993, p. 9)

A lot of the curriculum things that we wanted to implement we couldn't because of the behaviour of some of the students. With the computer lab, for instance. We wanted to get that going but we didn't have enough people to man it, but we thought we could have students to do

that but they weren't able to handle it. (Interview with Leslie, June 29, 1993, p. 3)

Laurie made the comment that the very things we are trying to do with these students are the very things that they can't handle. (Log, March 30, 1993, p. 33)

Although the L.E.I.F. Program appeared to have a disproportionate number of students with learning and behaviour difficulties, there were also a few exceptional students in the program. The data suggest, however, that even some of these students did not fit the program:

We had labelled 'gifted' students who felt they weren't being challenged enough and they felt that they had a right to say what they wanted . . . creating a lot of difficulties, and actually had no reason to complain because there were opportunities being given and situations being offered that a truly gifted and talented student would be interested in. They wanted other types of things that really were not productive or conducive to, sort to, expanding their horizons or taking that particular concept to higher level thinking . . . They were prepared to do work sheets instead of taking an opportunity to do activities that were, as far as anybody else was concerned, more interesting and using the information, the particular concept in a really practical and thought-provoking way. (Interview with Laurie, July 7, 1993, pp. 21-22)

We certainly had students who are capable of higher level type activities. But we had a lot of other ones that were certainly capable of it, but they just couldn't be bothered.

They just didn't have enough responsibility to sit down, and they weren't task oriented to sit down to really work and problem solve and come up with all sorts of ideas. The first idea was it--they didn't want to see what they could do with a variety of ideas and pick out which was best. They were just happy to get the first one and what was it. 'Just mark my book' and that's it. 'Don't make me think any more,' which was really discouraging. (Interview with Leslie, June 29, 1993, pp. 28-29)

Even our gifted students were coming from something very structured and very organized and not a lot of independence--very much teacher-fed, and weren't proposing or asking for that. (Interview with Morgan, June 30, 1993, p. 10)

The fit between program and student was not very close for the L.E.I.F.

Program. For the team, the biggest challenge came in trying to meet diverse learning and behavioural needs.

There's one thing that you learn from and that is you've got to have that balance of kids in the class. You can't just have the extremes. (Interview with Sandy, July 5, 1993, p. 23)

### The Parents

Parents comprised the other significant constituent group in the L.E.I.F. Program. The goal was to develop support and involvement through an active parents' group. The L.E.I.F. Program parents' group, however, never became a reality even though there was an initial meeting. Further, attempts to have parents speak to the students on their areas of expertise happened on only two occasions when one parent spoke about "Alcoholics Anonymous" and another gave a sewing demonstration. The trip to Camp Elphinstone brought parent involvement since five parents participated as cabin leaders. Otherwise, parent involvement was quite disappointing:

I'd hoped when I got into the L.E.I.F. Program and we had this variety of abilities and ranges, that we would have a very strong parents group--that they would be willing to work with us . . . But, as I say, on the whole, I was extremely disappointed that they didn't get more involved. (Interview with Leslie, June 29, 1993, p. 13)

Although parents did not actively engage in the operation of the program, several did communicate regularly with the team:

I had a lot more contact with parents this year than I had had in my previous teaching--not that it was every single parent, but there were certainly a large core of parents that I think felt comfortable about calling us and discussing things with us. I think we, as a group, called up parents more freely than I had seen before . . . So I think we developed a positive first name basis rapport with quite a number of parents that I hadn't experienced before. And I think that was positive. (Interview with Lyn, June 24, 1993, p. 19)

I would say that we were in a whole lot more contact with parents than most teachers. (Interview with Morgan, June 30, 1993, p. 6)

Despite this contact, it was still a challenge for the team to keep the parents informed about program intentions:

The challenge of the team had been to keep them (parents) adequately informed and, although monthly newsletters and phone calls home are the norm, it is recognized that there has not been enough time to address this properly. Effective communication with parents is the best way to address the misconceptions that undoubtedly occur with any innovation. (Interim Report to the Ministry, December 9, 1992, p. 2)

Some (parents) chose to involve themselves and made it their business to find out what was involved in the program and took the time . . . I think the majority of parents had an idea but one that was coloured a lot by their kid's feedback. So it was an unbalanced viewpoint about what it was like. And others who probably, I'm sure, had absolutely no idea what it was about . . . So, I guess, whenever you're dealing with a group that you don't see all the time and don't have the opportunity to relate to individually, you're going to get misconceptions. (Interview with Lyn, June 24, 1993, p. 24)

In some cases, misconceptions or unmet expectations made the parents

upset:

At the beginning of the year, they (parents) thought their kids weren't getting enough homework. There wasn't enough structure. Because we were getting ready for camp, they felt a lot of the things we did weren't in the curriculum which they really were. We did first aid, we did really good life skills. The forestry in science--we did things that were very interesting but parents felt the kids weren't being challenged. They didn't have, quote, 'questions to do out of the textbook' and so it couldn't be right. (Interview with Leslie, June 29, 1993, p. 14)

We have been under a tremendous amount of pressure from parents to assure them that the curriculum is being 'covered.' (Interim Report to the Ministry, December 9, 1992, p. 7)

In some cases, these unmet expectations may have come from high hopes for the program:

You attracted those parents of some of the brighter kids who wanted something other than the traditional education for their children hoping for a challenge for them, but you also attracted all those students who had been less than successful at elementary and they were hoping this different format might be the key to turning those kids around. (Interview with Sandy, July 5, 1993, p. 3)

Meeting the needs of such a diverse group of parents (and students) would place great demands on the team:

I really felt for the whole group and the whole team because here you are dealing with the kids, giving as much as you possibly could to the kids, more than they would get in the regular grade 8 classroom and the parents want more. Because you gave more, they became more demanding and they expected more. (Interview with Sam, July 8, 1993, p. 27)

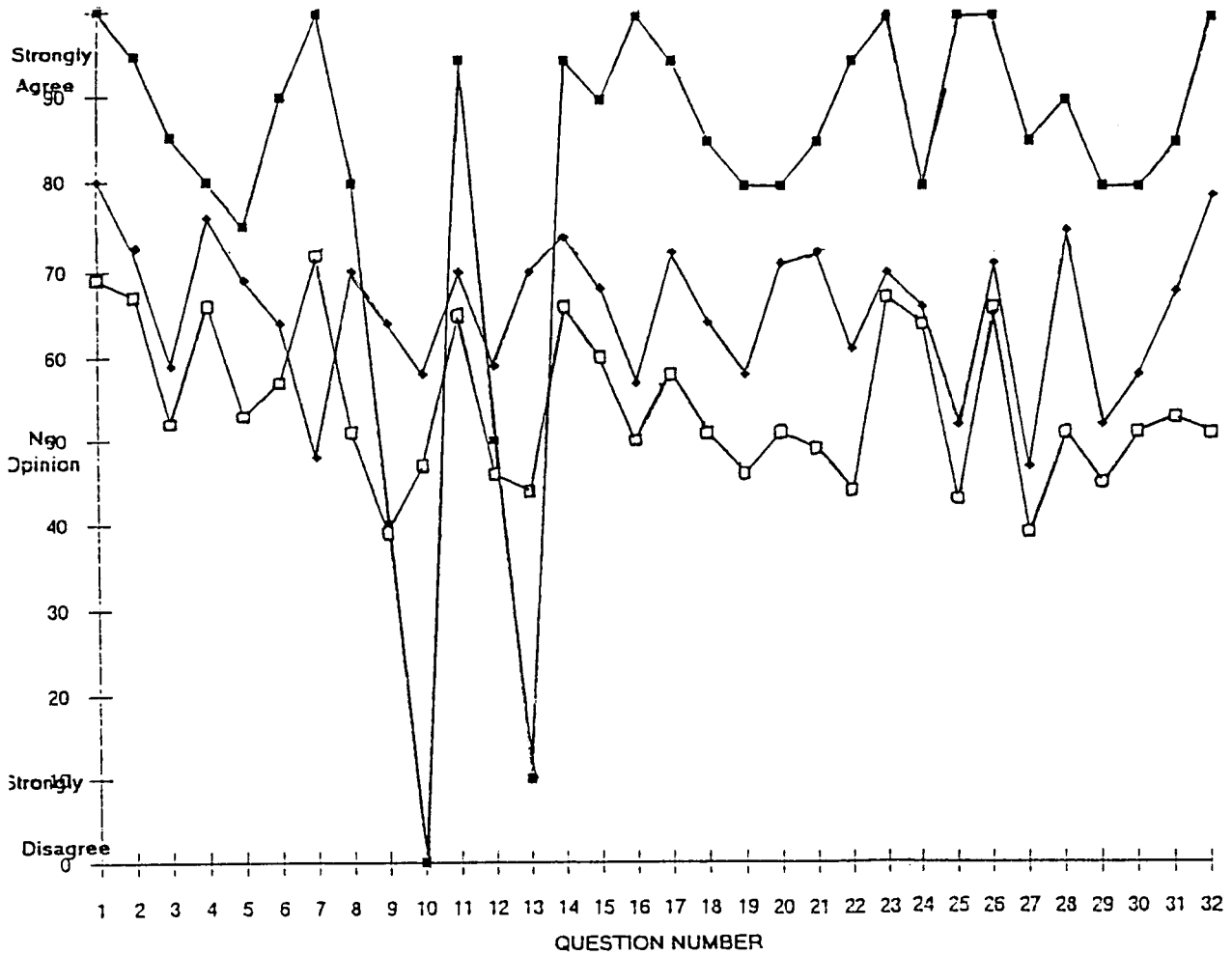
I just felt they were so demanding . . . Really hard on us . . . really, really hard. . . . (Interview with Laurie, July 7, 1993, p. 19)

We have very supportive parents, for the most part. We have some who want more and more and more out of us and we couldn't give that. But I think their expectations were unrealistic. I think our expectations are unrealistic sometimes, too . . . So as far as parents go,

we have both sides--I don't think we have any middle of the road parents. I think that we have really supportive parents and we have some who are still wanting the earth to revolve around their children and it's not going to happen anywhere, but I think we've come closest to it. (Interview with Morgan, June 30, 1993, pp. 6-7)

The importance of having the innovation fit with parents and the requisite skills of students is significant. A danger may arise, however, when innovators too easily blame lack of fit on the kinds of students or parents in the program and not on the varying expectations about the program. It seems that poor fit can develop as a function of unmatched expectations between innovators and the constituents. Further, the more implementation difficulties that an innovation faces, the wider the variance in expectations can grow with the innovators perhaps lowering their initial expectations and the constituents holding fast to what was promised. It is interesting to note that in the results of the survey (see Figure 1, based on the responses of all five team members, seventy-six students and twenty-eight parents with each point on the graph representing a weighted average of each group's response), the team consistently ranks their performance higher than do the students or parents. Is it because the team is more cognizant of the intricacies surrounding each component of the program and have adjusted their expectations to fit implementation difficulties while the constituents did not? (The only two questions where the team had a significantly lower response than the parents or students was in response to the "heterogeneity" of the students and the level of

SURVEY RESULTS



1. Variety of experiences
2. Necessary assistance
3. Differences in learning needs
4. Subject integration
5. Social, physical, artistic, intell. goals
6. Clear learning outcomes
7. High expectations for students
8. Positive pupil/teacher relationships
9. Adequate facilities
10. Heterogeneous student group
11. Fair and valid assessment
12. Supportive district administration
13. Supportive school administration
14. Promotion of life-long learning
15. Connection to real life experience
16. Teachers that encourage risk-taking

17. Teachers committed to prof. dev.
18. Behavioural responsib. and consequ.
19. Consistent teacher practice
20. Positive learning environment
21. Teachers who promote pos. esteem
22. Encour. for school involvement
23. Teachers who try for best learn. opport.
24. Good use of community resources
25. More parent contacts eg. phone, meetings
26. Good selection of electives
27. Effect. newsletters and meetings
28. Effect. report cards
29. Effect. formal parent-teach. interviews
30. Effect. communication of goals and intent
31. L.E.I.F. has had a successful first year
32. I would like to see L.E.I.F. continue

n= 5

n= 76

n= 28

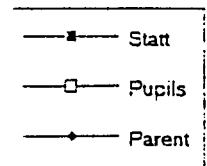


Figure 1. Graph of Survey Results (see Appendix B for sample survey form).

administrative support offered. All other responses regarding performance on the specifics of the program were ranked higher by the team). The data would suggest that innovators lower their program expectations to fit implementation difficulties while the constituents do not.

## **Leadership in Innovations**

### **Style of Leadership**

How leaders view change and the degree to which they are prepared to take an active role in that change may have impact on an innovation:

Introducing change is uncomfortable to all players and that's why you end up with your expedient administrator and your visionary administrator. I bet you both of them, they'll go through exactly the same emotions with any change whether it's thrust upon them or whether they created it . . . I think the difference between the two is what I just said in a sense--the thrust upon or initiating it yourself, being part of or having it done to you. Again, we come back to the whole notion of visionary and the people who don't embrace change. Let me play with this one even further. What is the difference between the two? Okay, your expedient administrator will be very reluctant to support some aspects of change because the round object won't fit into the square hole. The visionary one will say, 'I'll cut out the entrance. Stick it in.' It's that willingness. I think that's the difference between the two of them. It's that willingness to try rather than give up, a willingness to take a risk . . . that's what a visionary does. (Interview with Sam, July 8, 1993, p. 15)

Perhaps because of the administrative team's varying views toward change, they did not appear to have a common vision with regard to the L.E.I.F.

Program:

It was funny. There wasn't any consistency there. If you want to take a look at an administrative team, there wasn't any, you know, 'what is it we want?' There was not that honest, upfront, as a group, 'okay,



where is everybody coming from with this? What do we think?  
 . . . If you're taking a look at an innovative program with an innovative team of teachers you should be taking a look at an administrative team that supports that from the same tenets of planning, communication and consistency. That was not there. (Interview with Sam, July 8, 1993, p. 29)

Further, there is evidence that administration did not actively involve itself with the L.E.I.F. Program even though the principal could be defined as "visionary":

I think he (principal) thought, 'they can take care of themselves and let's see how they do.' I think he had enough on his plate and he didn't really have time for this. I guess there were too many things going on and I don't think this was a number one priority of his. Other projects were his, really his implementation, whereas this program wasn't. (Interview with Leslie, June 29, 1993, pp. 18-19)

And I think that was the biggest shot in the knees that this program got. There wasn't an active buy-in on the part of administration, and you're an orphan . . . Nobody was submarining you, but without the active support there's many ways to kill a program. One is to stand back and give it no support, and 'it's not my responsibility if it fails, I didn't do anything to stop it.' But if you don't do anything to help it, you are doing some things to stop it. (Interview with Sandy, July 5, 1993, pp. 7-8)

A risk-taking orientation on the part of the principal is not enough on its own; there must be enough ownership in the innovation to sustain involvement with the program, particularly when other pressing agenda items are in competition. The teacher team had difficulty coming to terms with this distinction, because the support that they thought was there during pre-implementation did not have tangible effect during implementation:

Well, they said, 'Heh, we're behind you. This is it.' They allowed us to change the staffing. Certain teachers were going to have to leave specialties and that meant hiring someone to take their place and so on, and those things happened so we felt if they were prepared to make that type of commitment, then they were prepared to be there for the rest of it. (Interview with Laurie, July 7, 1993, p. 11)

### The Problems of Leadership

It took time to realize that administration had more pressing items of a higher priority than the L.E.I.F. Program:

We're just flies on the wall, small potatoes compared to some of the other projects on the go in this school like school-based budgeting and the new timetable. (Log, November 26, 1992, p. 12)

Although the principal may have endorsed the goals of the L.E.I.F. Program, there was lack of congruence between the priority he placed on the program to that which the team placed, and when competing projects of a higher priority placed demands on limited resources, the result was that little, if any, support was given to the L.E.I.F. Program.

### Pressure and Support in Innovations

The frustration stemming from perceived lack of support cannot be underestimated. Lack of feedback and monitoring was difficult for the team:

He didn't come unless we asked and, when we did, he would cancel. He never dropped in to see how things were going. There was just no communication from September on. All of a sudden, there was nothing. (Interview with Laurie, July 7, 1993, p. 13)

There is a great air of uncertainty and we need to know if what we are doing on balance is okay because the problems jump out at you and

cloud your ability to see the situation objectively. (Log, October 7, 1992, p. 2)

We needed to have the most influential school administrator coming down to see how we were doing. I mean this is a brand new program and I think it was important for him to come down and check out how things are going. We certainly tried to get to him enough. And I think he could have shared his experience of having run a school because we really were a school within a school. And I think he knew what we would have needed, in retrospect. (Interview with Leslie, June 29, 1993, p. 18)

There was no, sort of, coming in to say, 'How are things going.' There was no voice mail message, 'How are things going?', 'Did you get this?', or 'Did you know about that?' or 'Can we talk about how things are going?' . . . I didn't have time to think about it until things got so bad and then there was this frustration, this anger, this criticism, all of this towards admin. that shouldn't have had to have been there. (Interview with Morgan, June 30, 1993, p. B4)

I thought that they would take some active interest in it because they knew it was a new program and obviously anything new is going to have teething problems and have trouble getting up and running and will require some close watching. It's like having a baby, I mean, when a baby is young, you've got to give it plenty of support and be there a lot to make sure it grows up and doesn't run into trouble and everything else. So anything new has to be more demanding of your attention until it's up and running and running smoothly and I didn't really get the feeling that was there. (Interview with Lyn, June 24, 1993, p. 9)

There was no conduit between our teaching staff and administration. You know, there was no regular time set aside for meetings. There was no, you know, 'Put me on your agenda. I need one day a month that's going to be my time with the L.E.I.F. team.' It would have been so very simple. (Interview with Morgan, June 30, 1993, p. 6)

Further, the lack of active involvement in the innovation led some people to question whether some administrators valued the program at all:

I don't think they've got the idea of what a middle school is . . . maybe they just didn't realize the importance of it, of a middle school. (Interview with Leslie, June 29, 1993, p. 19)

When we didn't have our numbers of students there wasn't anybody scrambling to try and say, 'let's try and get more kids into it.' It was like 'Oh, hardly got any kids, so we're going to can it.' Certainly nothing that I would have thought would be forthcoming from people who would be supportive of the program . . . it's not what I would expect from people who want to see the program running next year . . . I inferred from that that there wasn't an awful lot of energy or interest in keeping the program running. (Interview with Lyn, June 24, 1993, p. 14)

But it would have been nice, too, at the administrator's meeting, if our principal had talked to the other principals every so often and said, 'Oh, the L.E.I.F. Program is doing this' . . . not that we have to go on, quote, and 'brag,' but there were some neat things for our principal to come down and see that maybe he could toss out to the other principals so when articulation came, these principals could have talked to their staffs a bit more. (Interview with Morgan, June 30, 1993, pp. 25-26)

The cool manner, the offhandedness . . . the almost offhand casualness with which he (principal) regarded or spoke of this program, terminating conversation very quickly, indicative that there was no pride, no anticipated achievement to be derived, that it was something that was a political decision, it was running its course and when it was done, it would be gone. (Interview with Sandy, July 5, 1993, p. 14)

One of the new administrators who had previously held the position of District Principal, Intermediate Program, was very supportive, but the level of his support was limited:

When we needed any advice we turned to him and he was usually able to help us out extremely well. As he turned into admin., he was extremely supportive. We couldn't have asked for a nicer person to work with. But he became busier and found that there's only so many hours in the day and only so many things he could do. But he tried to support us whenever and wherever he could. And, as I say, he was

limited in what he could do. (Interview with Leslie, June 29, 1993, p. 23)

We had magnificent support from the new vice-principal. However, that poor soul was not in a position of power and so, unfortunately, even though he gave us a lot of support, it couldn't go very far. Administration 'where the bucks stopped,' we just didn't have a lot of support. (Interview with Morgan, June 30, 1993, p. B3)

It may be fair to say that since the principal did not place a high priority to the L.E.I.F. Program, it was easier to see it end after only one year of implementation. Unfortunately, since the team held the program as a high priority, this incongruence, once again, led to feelings of disappointment:

I feel disappointed because I think next year would have been more successful. We've had successes this year, but I think we would have felt more successful next year . . . We felt like we were in a battle field all year. And I think next year we could have enjoyed ourselves more. (Interview with Leslie, June 29, 1993, p. 31)

I think now if we had been able to do it next year, we would have said, 'Well, this isn't really important or it links better this way' or 'these linkages would work better.' As far as my feelings, I'm very disappointed now because I know it's not going on next year. But, earlier on, and I guess my greatest hope, even up until the beginning of June, was 'Yes, we will be able to do this better next year' and now I feel dreadful. (Interview with Morgan, June 30, 1993, p. 4)

I think my biggest disappointment is that it ended before it really got going. (Interview with Lyn, June 24, 1993, p. 26)

I think their interests were elsewhere. Again, if they want something to go, it would go, but I guess it sounded nice at the time, but they weren't prepared to put the time and effort that was going to be necessary. You know, a program like this takes at least five years to get off the ground and if they weren't prepared to make that type of commitment, then they really shouldn't have had it in the first place. (Interview with Laurie, July 7, 1993, p. 16)

The whole problem with this program is that it did not have enough time. What happens the first year is you take a look at all the bends and turns and the variables that were thrown at the group which would have probably happened anyway . . . and make sure you realize that year one is just the formative stage of the plan. There has to be follow-up to improve what you've done, not to sit and say, 'this is a failure.' It's not a failure. (Interview with Sam, July 8, 1993, p. 6)

Another area of frustration for the team came from lack of funds:

It didn't seem like we had an awful lot of support or interest from people in administration on a day to day basis and that expresses itself in the fact that we didn't get any money, that there were misconceptions about how much money we had, or should have, or where it was coming from. So there was big confusion about budget. And that's when it comes down to one of the big things that administration has to offer any program and that is to give the money to run it. (Interview with Lyn, June 24, 1993, p. 9)

We assumed that budget allocation was an administrative responsibility and that it would be taken care of because, generally speaking, teachers leave that to the powers that be. I guess we should have checked our budget but we had many things on our plate to take care of and it came as quite a shock that there really wasn't any funds there. (Interview with Laurie, July 7, 1993, p. 7)

As mentioned earlier, there was confusion over the use of the developmental site grant monies:

There wasn't recognition that the grant was for the planning time that you used the year before and it was designed to provide time for the teachers to collaborate rather than to fund the program. (Interview with Sandy, July 5, 1993, p. 7)

The program was given monies once the grant money confusion was cleared up. Yet, even this seemed insufficient:

When I look at other department's budgets and compare it to what we got, I realize how little we got monetarily. (Log, April 5, 1993, p. 35)

But as Smith and Keith (1971) point out, innovations often require more resources and the more difficulties they face, the more resources they require. But giving more resources to one area of the school is sometimes difficult to justify when equity is important among departments:

Compared to the rest of the school you are staffed fat . . . your PTR was much lower than throughout the rest of the school . . . As early as last December (1992) the principal made the comment that if the L.E.I.F. Program were to go for another year, you would have to exist or survive within the same PTR as the rest of the school . . . there is no way he would give you funding beyond what was available to other departments. (Interview with Sandy, July 5, 1993, pp. 16-17)

Funding was definitely an area of discord resulting from incongruent priorities with regard to the L.E.I.F. Program. Limited resources force leaders to prioritize their projects, and the L.E.I.F. Program did not rank as high as the team would have liked on that list. Frustration and anger could have been spared if only this prioritization was spelled out in advance.

Another area of disappointment for the team was in the assistance they felt administration could have provided with organizational linkages; namely, linkages to departments, the district, reporting and attendance systems and the like:

I think it was really difficult. We knew what needed to be done, generally speaking, but we didn't have the power to make the changes and I think that was frustrating. We were quite capable, I think, of making the changes. We just didn't have the authority to do that. (Interview with Laurie, July 7, 1993, p. 7)

There seems to be no willingness to put a linking system in place for mastery learning. There is a lack of coordination--poor linkages and no

one in admin. is willing to do this on our behalf and we do not have the authority, time or energy to do it ourselves. (Log, April 30, 1993, p. 40)

It is always an issue like bubble sheets coming to a head and us looking like fools to the rest of the school because of poor linkages. There is no on-going support, monitoring or assistance in correcting or preventing situations like these--to prevent them from getting to the upsetting point that they always do. (Log, April 30, 1993, p. 40)

We were just so busy trying to survive basically from one day to the other then, all of a sudden, we would realize that, you know, hey, some of these responsibilities can be taken care of by admin. and they weren't being taken care of. And it was a real struggle . . . I almost felt like they didn't want to be there. I don't think they did. I think we were a pain in their backside. (Interview with Laurie, July 7, 1993, p. 13)

I don't believe there was anybody coming to you and saying, 'Okay, who's going to go out and market your program with the articulation team? Are you ready? Can you do this?' (Interview with Sandy, July 5, 1993, p. 9)

If the will had been there to say, 'Counsellors, this program is important. You plug it, right?' You can say those kinds of things when you are the boss. (Interview with Morgan, June 30, 1993, p. 7)

Nobody can do that but an administrator. That's their job. They have to say, 'Look, we have this program here and it needs support.' I don't think that was made really clear to department heads about how important the program was to the school . . . 'Guys, this is important, this is part of the school. These people are taking a major risk here. How can we help them?' . . . That kind of support was not there. (Interview with Morgan, June 30, 1993, p. B5)

Once again, it is likely that the support was not there because the principal did not place the same priority to the L.E.I.F. Program as did the team.



Another area of confusion for the team was the perceived inconsistency in the level of support found in the school administration compared to district administration:

I think they (district administration) were a lot more prepared to at least give us a pat on the back, but pats on the back are nice and certainly appreciated but again, they felt it was the responsibility of the principal to be implementing the program and giving us the things we needed. (Interview with Laurie, July 7, 1993, p. 15)

We've always had wonderful support from senior administration . . . and even to this moment . . . they have the same vision that we do about where this program should be. (Interview with Morgan, June 30, 1993, p. 8)

Senior A.O.s were very supportive and when they came down they were always quite positive. Other than that, that was it. They gave their moral support. (Interview with Leslie, June 29, 1993, p. 23)

They (the district principal and assistant superintendent) quite supportive and would pop in to see how we were doing. Maybe from a moral point of view--I didn't see any evidence of actual, you know, actual assistance . . . but again, we didn't ask for it either. At least I didn't or I didn't hear of anyone asking for specific assistance on a particular issue. (Interview with Lyn, June 24, 1993, p. 12)

I think the view was supportive from central district. It was supportive because it was politically correct . . . politically correct from the point of view that it was the direction to go because of the tenets set down in the 'Year 2000.' (Interview with Sam, July 8, 1993, p. 17)

District administration, although quite supportive of the L.E.I.F. Program, seemed to be limited to providing moral support.

The data suggest that leadership is a difficult role faced with many competing priorities for limited resources. It could prove to caution leaders about taking on too much change at once and, where there are competing

projects, it is important to have priorities spelled out in advance and privy to all players so that all know where they stand. The exercise of establishing priorities may, in itself, be useful in helping the leader decide if too many projects will be placing too much strain on limited resources. It is important to note, too, that resources include time and energy as well as funds. As mentioned, much of the frustration and anger experienced from the team stemmed from incongruence between the priority placed on the L.E.I.F. Program by themselves and the principal. This is significant, since it cautions innovators to make sure they understand where they rank for resource allocation before they begin their undertaking. Further, the team felt that the principal did not make himself available to find out what was involved in the L.E.I.F. Program. Do leaders who choose not to actively involve themselves in innovations underestimate the difficulty and level of support required for innovations? The data in this study would suggest this to be so.

### **Innovative Features**

#### **An Overview of the Content of the Innovation**

The L.E.I.F. Program's goal was not to make curriculum based changes but rather organizational and methodological changes. (Ahrens, 1973):

The Parkview Secondary School L.E.I.F. Program ('Learning Environment that is Integrated and Flexible') involves a team of five teachers to a student population of ninety grade eight students. In an effort to promote relevance for the learners, the curriculum is integrated through a two subject focus on a quarter system timetable and, whenever possible, guests from the community are invited to share

their expertise. Since this is a 'school within a school' concept, the team is afforded the flexibility of their own timetable in order to best accommodate the learning needs of students. The goal is to have learning, assessment and evaluation designed around well-articulated outcomes which emphasize both the cognitive and affective domains. The driving philosophy of the program is 'success breeds success' and this is reinforced daily in the mastery learning component of the program. (Interim Report to the Ministry, December 9, 1992, p. 1)

As mentioned previously, the team was under pressure from parents and departments in the school to ensure that they "covered" the same Ministry endorsed grade eight curriculum. The challenge of implementing the organizational and methodological changes; namely, integration, teaming, mastery learning, flexible timetable structure, individualized instruction all within a non-traditional facility are discussed separately.

### Integration

Subject integration was both challenging and successful:

While curriculum integration has not been fully established yet, we have had tremendous success particularly in the third quarter when we used the fine arts to strengthen and reinforce the social studies curriculum. (Presentation to the Board of School Trustees, May 11, 1993)

I think the integration with the fine arts and socials was a highlight. I think that was really something for our school, for the students to really experience having socials out into so many different areas of the fine arts--the drama, the music, the band, the art, to see how they could, you know, integrate it into different things. It wasn't just a textbook thing--they could bring it to life. (Interview with Leslie, June 29, 1993, p. 15)

The third quarter was a very creative and successful quarter for us and we wish we could have had an 'Open House' to showcase some of our projects (as you know, job action prevented this). We had a 'Roman

Banquet' complete with a sample of Roman foods; a 'Roman' play entitled 'Rinse the Blood Off My Toga'; 'Medieval Newscasts' where we highlighted the medieval news of the day (and strengthened understanding of the Social Studies curriculum); did sculptures and drawings; and did a close examination of Shakespeare's 'Romeo and Juliet' so we could do our own dramatic version of it for the class; and had our Band students perform music from the Medieval-Renaissance era. (Newsletter to parents, April, 1993, p. 2)

Integration was not limited, however, to just the fine arts and social studies but the data suggest that this was the most successful connection. The team notes the challenge associated with integrating subjects:

The integrated approach to the curriculum has not come without difficulty either. The team finds that it is very stressful teaching in unfamiliar areas and that this inhibits the amount of creative teaching strategies which can be employed. We are convinced that year two of this program will be much easier once there is more familiarity with the entire grade eight curriculum. Also, there are some areas in the curriculum which are very difficult to teach if there is not a specialist within the team. For us, technical education posed a particular problem. Therefore, we 'traded' time with two colleagues so that we could bring their expertise into the program. This created difficulty for us in the second quarter, however, because we were then tied to the school timetable in order to accommodate the teaching schedules of these two people. As a result, there was much less integration in quarter two. (Interim Report to the Ministry, December 9, 1993, p. 5)

Integrating the affective domain also created difficulties for the team:

Year two of the L.E.I.F. program should also see a greater emphasis on the affective domain. While we have this domain in our student outcomes, we have not adequately addressed it yet. We suspect that this will be easier to address in year two once we have a better grasp of the cognitive requirements. (Interim Report to the Ministry, December 9, 1993, p. 7)

Leslie, however, notes one successful aspect:

To have the opportunity to know ninety students on a very close basis. These kids have got friendships now that will last them, I would say, for a life time for some of them. No other grade 8s have had the opportunity to come so close with so many students at one time. These students are really fortunate that they had the opportunity to do that. (Interview with Leslie, June 29, 1993, p. 15)

Further, integrating community involvement was another aspect of the

L.E.I.F. Program:

Our emphasis on community involvement, while not fully developed yet, has seen us invite some interesting speakers to our program (some of whom have been parents of our students). (Interim Report to the Ministry, December 9, 1993, p. 5)

While we did have some interesting speakers this year, we did not involve the community to the extent we had hoped to. (Presentation to the Board of School Trustees, May 11, 1993)

We had a number of presenters. We had a theatre group come in to present some views on migrants in a play form and that was great. I really enjoyed that. We had a former 'Globe Trotter' come in to speak to us about staying in school. He was great and the kids loved him. We went to visit a Sikh Temple and the kids were great. I think they really enjoyed it and found it interesting. There were opportunities to go to some plays. Those were quite successful for the kids to view programs and plays. (Interview with Lyn, June 24, 1993, pp. 27-28)

So the team had some success with integration, but not to the extent that they had originally planned.

### Teaming

Teaming also had its successes and challenges. The findings tell much about the benefits of team teaching:

Teaming has been most beneficial in enhancing the learning outcomes of our students. The students have benefitted by working intensively with a group of educators who know them very well. Parental contacts have also been improved, and we have gotten to know many parents very well. Teaming has also provided the opportunity for consultation and problem solving around concerns with particular students. In addition, the students have had the opportunity to learn from teachers who individually possess different teaching styles, making the match between learning and teaching more readily available. (Presentation to the Board of School Trustee, May 11, 1993)

. . . it has been interesting for us to learn from one another as we plan and deliver the curriculum. Perhaps the greatest benefit from a team approach is the support we give one another--it would be very difficult to go back to teaching in isolation now. (Interim Report to the Ministry, December 9, 1993, p. 4)

We relied an awful lot on each other for moral support and that we weren't afraid to express our feelings--the team would let us vent our frustrations and not think any less of us. (Interview with Leslie, June 29, 1993, p. 10)

The team was there as personal support, as educational support, psychological support and emotional support, all those kinds of things. We couldn't have done all the things we did if it hadn't been a team approach because there was always someone to pick up what might not have been done by someone else. (Interview with Morgan, June 30, 1993, p. 7)

I loved the opportunity to walk into a classroom and sit in the back and learn from my colleagues. Or if they were speaking about something that I knew about, I could interrupt and add to what was said. I think a lot of role modelling was done. I think that's one thing we were very successful at--the kids saw that we worked very well together, that we could walk in and throw an arm around a colleague as they were doing something and they saw that there was a real warm rapport and that we respected each other and we helped each other whenever we could . . . We didn't work hard at that, it just happened naturally because of the respect that we had for each other. (Interview with Laurie, July 7, 1993, p. 7)

It's been a really nice experience to see others teaching the same group that you have and seeing how the kids respond to them and you pick up some of their good techniques. (Interview with Leslie, June 29, 1993, p. 29)

I think a lot of us had different personalities so it was nice to see how someone else would handle students that you were having difficulty with so that you could incorporate that into your repertoire. (Interview with Leslie, June 29, 1993, p. 10)

The student had five different individuals that they could relate to--I didn't get along with or empathize with some students as well as other members of the team. But then, there were students that I got along with and empathized with better. I think that's the real benefit of a team. (Interview with Morgan, June 30, 1993, p. 5)

I don't think there was anyone in the school that had a closer relationship with their students than we did because we were with them all day long . . . There was no getting to know new kids. If they didn't do good quality work, you could get right on them. So that was a really nice thing. (Interview with Leslie, June 20, 1993, p. 12)

The students knew that they could take whatever problem they were having to whomever in the team that they felt most comfortable with and I think that was a great advantage to our group. (Interview with Laurie, p. 21)

There is some evidence that this team had an exceptionally egalitarian relationship:

Nobody felt like, 'I'm in charge and you're not' or 'you came in late so you're on the bottom' or anything like that. We considered each other as equals and listened to each other. That was good and I think it requires people who can work in that environment and that's not everybody. You have to leave your own issues at home and have to be open to ideas from other people and be willing to try them . . . You have to be willing to say, 'Okay, let's chuck that out and let's try something different' and 'Forget my idea and we'll go with yours because I think it has validity and the other people seem to think that's a good idea.' (Interview with Lyn, June 24, 1993, p. 16)

The findings also tell of the challenges of communicating among a team:

While the team approach has been very beneficial, it hasn't come without the difficulty of having to effectively communicate. This has not been easy because there has been so little time for formal meetings in light of after school tutorials. (Interim Report to the Ministry, December 9, 1992, pp. 5-6)

We didn't really have a chance to communicate, to really sit down and have time set aside to meet. We did try to sit down once a week, but it was so difficult because there were so many demands put on us with the teaching load that we really didn't have time to sit down and communicate as well as we could have, as well as we wanted to. (Interview with Leslie, June 29, 1993, pp. 11-12)

There needs to be time built in for collaboration. I think that was another reason that we weren't as effective at integrating subjects. We had no time. We were always with the kids. All day long. From before the moment school started until five, five-thirty some nights . . . And not having a spare, a common spare. (Interview with Morgan, June 30, 1993, p. 11)

We really didn't have time to meet unless we made opportunities. Pretty late in the day after doing our teaching and taking care of any paper work and such. So there really wasn't much time unless you were prepared to stay quite late in the day to meet which is unfortunate. We certainly tried, but with rewrites and individual help after school, it was pretty difficult for all five of us to meet. (Interview with Laurie, July 7, 1993, p. 27)

Every time one person is absent from a meeting, it weakens the decision of the team and we don't always have the time or energy to go back and review the main parts of the meeting. (Log, October 5, 1993, p. 1)

A frustrating aspect of teaming is that one team member will get a piece of information that is valuable for all of the team to know and then get sidetracked and forget to pass it along. It is very difficult. Communication is the key thing. (Log, February 1, 1993, p. 20)

There is an unfortunate assumption by other staff members that if you tell one team member something, you are telling the whole team. I



don't have time to pass on other people's messages! (Log, February 16, 1993, p. 23)

Besides communication difficulties, the data suggest that consistency of classroom practice is also important:

Since most of our initial difficulties have been with consistency in classroom practice within the team, we would recommend that any prospective teams of teachers spend a considerable amount of time articulating this in advance . . . we did not deal with it thoroughly enough prior to September (1992). (Interim Report to the Ministry, December 9, 1992, p. 6)

When a team gets together then, they're obviously going to have to sit there like parents because there is more than one and come up with a consistent approach. What was happening was there were all sorts of different styles in the team. (Interview with Sam, July 8, 1993, p. 23)

Sometimes the lack of consistency within the team really bothers me. If we agree we are going to collect fees, then we all must do it. If we agree to do bubble sheets, we all must do it. It further complicates matters when one team member is missing. (Log, December 8, 1992, p. 15)

Further, there is evidence that effective teaming required sophisticated forms of coordination:

I would prefer having one person giving the lecture and the rest of the people supporting the learning in other ways because it bothers me to have the duplication. You know, everybody doing the same lesson in the more traditional way . . . So if we had one person giving the lecture and then we split up into our groups--four or five groups--to revisit the information, that would be better. (Interview with Morgan, June 30, 1993, p. 8)

For consistency it would be best that one person deliver the curriculum so that it's being delivered in the same manner to everyone, and others supporting it in whatever ways they feel is relevant. For example, I did the 'Life themes' when Janet did the science and I tried to pertain it to what was happening in their own lives, what was happening in the

world today . . . So we looked in the papers and they did projects on events that were happening in the world . . . Probably having everybody teaching the same thing is just like the old way . . . I think we were just copying the old when we did the math with all of us doing the same lessons. And it didn't give us the flexibility, the opportunity to draw in the real life aspects of what was being taught. (Interview with Laurie, July 7, 1993, p. 25)

The kind of coordination that the team preferred required more interdependence and "tight links" among the team--and planning for this took the time that they did not readily have. Perhaps this is why the bulk of the year was spent with four of the five teachers duplicating the same lessons to the students. It would appear that past experience may have an influence on the difficulty in attaining the more sophisticated forms of coordination; in many ways, the team was attempting to be "tight linked" when their previous experience as autonomous professionals was "loose linked."

### Mastery Learning

To the team, mastery learning was one of the highlights of the L.E.I.F.

Program:

I think that mastery was definitely a really important part of our program. We had a lot of success with our students. There were few failures. These students had the opportunity to achieve 80 percent or better. They had so much support. They had the opportunity to do retests. And I think that was really innovative for our school because it never happened before. (Interview with Leslie, June 29, 1993, p. 15)

I think that's something mastery learning can offer kids--a chance to achieve success and it can be quite motivating for kids when you have high expectations and you give them the opportunity to achieve that. (Interview with Lyn, June 24, 1993, p. 8)

There were certainly students that would have never achieved a B status or better without the mastery approach, the opportunity to do rewrites and so on. And I think that encouraged certain students to do better. I think it was a really positive experience. (Interview with Laurie, July 7, 1993, p. 23)

Mastery learning, however, had to be modified and streamlined:

We have streamlined mastery learning throughout the year and are particularly pleased with the retest policy which we have established. More accountability has been built-in by having students qualify for the opportunity to do retests . . . While we are happy with our retest policy, we need to refine how we address correctives and extensions. (Presentation to the Board of School Trustee, May 11, 1993)

And, once again, it was a challenge to keep parents informed about how mastery learning worked:

Some parents are alarmed at the INCOMPLETES which have been assigned when the student has not yet reached 80 percent. While we can assure you that we will provide support to those students who have the commitment to attain mastery, those who do not attain mastery will not be denied access to any grade nine subject provided their percentage is over 50 percent since 50 percent is the requirement of the school. In other words, as far as the school at large is concerned, it is the overall percentage which is important. We will continue, however, to maintain 80 percent as our standard because we know that even those students who have not attained mastery are attaining higher percentages because we have mastery learning in place. (Newsletter to parents, April 1993, p. 2)

Mastery learning was also a lot more work for the team:

The marking is unreal--mastery is a lot of work. You have to write two different exams and then you have all the extra marking for the retests, never mind the time it takes to administer the retests. (Log, October 6, 1992, p. 2)

Further, the difficulties in fitting the mastery learning reporting system with the school reporting system has already been noted.

### Flexible Timetable

There is much to be said about a flexible timetable:

It has been easier to meet instructional objectives through a timetable which can be altered to accommodate speakers, presentations and field trips. While we had an established timetable, it was comforting to know that we could alter it at any time in order to take advantage of educational opportunities. (Presentation to the Board of School Trustees, May 11, 1993)

There were a lot of interesting things that happened at the spur of the moment. We just heard about it so we said, 'We'll get that person in' and so we had the flexibility to do that since we all worked together. We could say, 'Okay, we'll do this class tomorrow and we'll all come in and see this presentation' and I think that's really great to be able to do that, to have that flexibility. (Interview with Lyn, June 24, 1993, p. 28)

The flexible timetable has made inviting guest speakers to the program or organizing field trips much easier. (For example, we were able to take our whole group to Camp Elphinstone for three days in September.). (Interim Report to the Ministry, December 9, 1992, pp. 4-5)

Even though the timetable was not always changed, the team appeared to enjoy the flexibility when opportunities presented themselves.

### Individual Learning Needs

As previously mentioned, the diversity of the students found in the L.E.I.F. Program made accommodating individual learning needs very difficult:

I was feeling that I couldn't teach to all the levels, especially with the high number of students who were really not prepared for grade eight math, and then the other group that were really well prepared for grade eight and could have probably gone on to grade nine. That was a very difficult thing. (Interview with Morgan, June 30, 1993, p. 5)

The conflict between differentiated goals and differentiated means (Smith & Keith, 1971) was evident:

I think we spent a lot of time looking at students, who these people were, and where they are coming from. I know for myself that every time I looked at that student and gave out X amount of work, I would know that, 'Yes, this person could achieve this amount in this amount of time,' and I would allow extra time if necessary. But there were some students who had difficulty with that, because they come from, 'Well, if I can get it in by such and such a date, why can't everyone else?' (Interview with Morgan, June 30, 1993, p. 6)

Accommodating individual learning needs is often easier said than done:

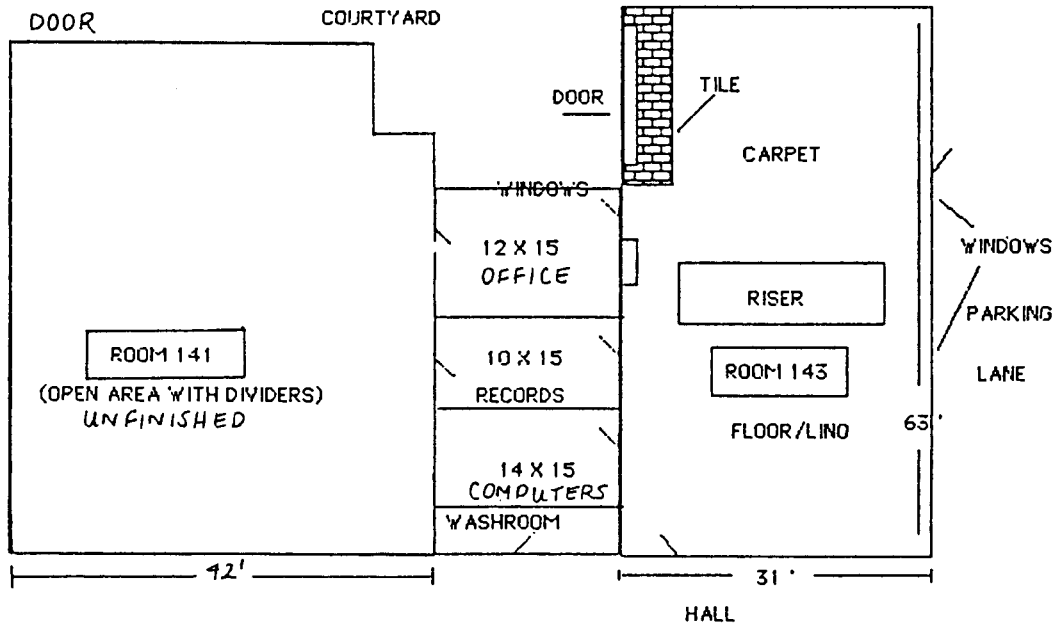
Trying to end up meeting all of the individual needs and aligning your practice with that is very difficult. (Interview with Sam, July 8, 1993, p. 10)

For the L.E.I.F. Program the dilemma between differentiated goals and differentiated means was not adequately resolved, making the team's efforts in addressing the diverse needs of their students even more difficult.

### Facilities

The L.E.I.F. Program was centered in two previously unused "shop" classrooms, one of which was renovated specifically for the L.E.I.F. Program (see Figure 2). The openness of the classroom space posed unanticipated difficulties:

We had one room renovated, an old automotive room and it was nicely done. It had risers for an audience and open areas, but the practicality of trying to teach two classes in that room didn't work. The noise level was too much . . . And we had another room next to it that wasn't finished--we called it the 'unfinished room' and basically that's exactly what it was. It was nothing pretty to look at at all. In fact, it was quite boomy to have more than twenty kids or so in it. What



RISER TO SIT 100; SEE ROOM 105; SHORTER/HIGHER; ALSO FOR STORAGE

WALLS COVERED FOR DISPLAY PURPOSES

ROOM 141 AND 143 FLEXIBLE AND 4 CLASSROOM AREAS 25 STUDENTS/AREA

ROOM 142 SCIENCE + SMALL GROUP

Figure 2. Diagram of L.E.I.F. Facility.

made it very difficult to teach was the sound level which was quite unbearable at times. So the actual teaching facilities was not what we hoped it would be . . . The best part of the facility was our office, you know, and that we had an office space together to talk and have time together. I think the risers and the performance area was good for presentations . . . But overall, the facility was fine, but it really wasn't conducive to a really comfortable teaching situation. (Interview with Laurie, July 7, 1993, p. 26)

The space in the finished room was wonderful with the risers and the decor. The one problem was the sound--the ceilings needed to be lowered. Also with the fans there was a lot of extra noise. So the heating wasn't great. In the other room, the unfinished room, we still had the instrument repair people working on saws just off it, especially early in the year. And if you wanted heat, the fan would go on and that added to the noise. And then the wooden floor echoed as well as the high ceilings. So it was very difficult to teach in. (Interview with Leslie, June 29, 1993, pp. 9-10)

It became quite apparent that we were not going to have two classes in each room which was why we needed to take over a couple of classrooms in the school. We had one finished room that had dreadful acoustics because of power saws going across the hall. Then we had one wonderful area, potentially wonderful area, where we planned to have students sit for productions. (Interview with Morgan, June 30, 1993, p. 11)

There was too much through traffic to get into the unfinished room which was big, noisy, cold. You had to walk through one of the other classrooms. That classroom was finished and contained a part with risers which we ended up not using as a second classroom because it was impossible to run two classes in there. There was too much noise transmission between the two sides so we had to get other rooms outside the L.E.I.F. Centre. So it certainly was far from ideal. (Interview with Lyn, June 24, 1993, p. 19)

Negotiating additional rooms in the school also created difficulties:

We had to keep negotiating for rooms out in the school which ended up being difficult. We seemed to get resistance and having to negotiate new rooms every quarter was a bit of a pain. (Interview with Laurie, July 7, 1993, p. 26)

Having the team split up in different areas of the school was also less than ideal:

I think if we had all been within the same area, it might have been easier. But when someone was elsewhere in the school, it was very difficult to communicate because we often wouldn't see each other. Whenever a team is formed, it is extremely important that the whole team be in the same area. When I was upstairs, I felt abandoned and all by myself. (Interview with Morgan, June 30, 1993, p. 10)

One is reminded of Smith and Keith's (1971) observation that open teaching areas can restrict freedom rather than enhance it; in the L.E.I.F. situation, there is evidence of this. In addition, Weick's (1982) comments about the visual and aural dependencies in open classrooms is also relevant to the L.E.I.F. facility. Open classrooms like the L.E.I.F. facility that are designed for flexible teaching situations can actually restrict them instead.

For the L.E.I.F. team, it was challenging to manage all of these innovative features at once:

The things we are trying to do are difficult enough even if we were just one teacher trying to implement them. But they are made even more difficult and complex by virtue of the fact we have to coordinate all these things in a team fashion. (Log, April 30, 1993, p. 40)

The team took on many difficult aspects of change at once, any one of which would have been a major undertaking in itself.



## **Outcomes: Intent vs. Reality**

### **Unanticipated Problems**

There is much data to suggest that the L.E.I.F. Program experienced unanticipated events:

I think a lot of variables were thrown at the program that the team did not have time to deal with because of the 'seat of the pants' concept. They could not deal with them because they were in the midst of practice. So there were a lot of things that occurred that, 'Well, what are we going to do here,' and it had to be done while you were actually involved heavily in the actual running of the program. So that, again, comes back to the 'seat of the pants' notion--the idea that 'Okay, we've got a problem that we didn't anticipate, what are we going to do about this?' And 'We've got 4000 other ones also,' you know?

The data give evidence of a variety of unanticipated problems:

We had so many problems. I'm not trying to make excuses, but with all the behaviour problems, we were limited. Also, we had too many things going on. We were trying to teach, trying to market the program, trying to implement new things and we were trying to do everything without the support of admin. Also, having a decent budget would have helped us out because we spent more time just trying to scrape up money some days . . . I mean, we didn't know we were going to have those kinds of problems. Hindsight is great. (Interview with Leslie, June 29, 1993, p. 31)

We had kids that could not control themselves. You'd turn your back for two seconds for them to go out and have a break and there would be a fight. You'd have to deal with that, but that would take every ounce of your being and then you'd have to teach the class again. And you could have had a great class, and it seems that all the energy that you needed to have for your next part of your class was wasted on separating a fight. And then, also too, we'd be going along planning the next quarter and the day before the quarter would start, we'd have lost the rooms we had planned on using in the school. We wouldn't have our room. We wouldn't have the materials we needed. (Interview with Leslie, June 29, 1993, pp. 16-17)

We are consumed by constant problem-solving. (Log, February 10, 1993, p. 21)

This program has taught me how to go by the seat of my pants. (Log, April 7, 1993, p. 35)

The initial plan and the initial participants changed drastically. Variables were thrown against the program that weren't planned on. Some of the participants withdrew; for example, I was unable to be an active participant and Kelly was unable to participate in the team. And what ended up was, 'Okay, fine, who's going to pick up the slack' and this tight little team who were planning the program were no longer the same and we ended up with a different group. And that's not to say that the new team was negative, but the 'seat of the pants' concept was, 'Okay, those people that have these responsibilities are no longer here so who's going to have to pick that up?' That 'picking it up' is usually done by the 'seat of the pants.' You're thrust into a situation you are unprepared for and people are having to pick up things they're not really prepared for from a theoretical or practical base. And so they are doing it as they are practicing - by the 'seat of the pants.' (Interview with Sam, July 8, 1993, p. 4)

Anticipating the problems may have tempered implementation difficulties:

It wasn't until later that it sort of dawned on me that if we had examined all the ins and outs during the planning phase that would have tempered, I believe, some of the decision-making that led up to the 'seat of the pants' implementation that was thrust upon the group. (Interview with Sam, July 8, 1993, p. 20)

But anticipating all the problems is difficult, if not impossible:

If we were reliving the whole thing, we could anticipate what the problems were, I don't know, crystal ball, and put in procedures to deal with them so that everybody in the team was like a collective and everybody knew what their role was when this happened. (Interview with Sam, July 8, 1993, p. 20)

But there is no way you can foresee all the problems. The 'seat of the pants' will always happen whether you take two years of planning or a different team of teachers. (Interview with Sam, July 8, 1993, pp. 5-6)

Unanticipated problems in the L.E.I.F. Program had the consequence of program "blunting" . . .

### Program "Blunting"

There is evidence that as the team struggled with unanticipated problems, changes were made to the program that made it considerably different to the original intent:

Maybe it was a bit of our naivete, but I think right away we initially realized that certain things were just not going to be able to happen. So I think right away we were making changes before we'd even been able to try certain things based on the response that we got from the students. (Interview with Laurie, July 7, 1993, p. 11)

The school followed the same timetable as us and we followed some of the same teaching techniques as the school. We did the same teaching. We followed the math curriculum, what the math department did--we did the exact same thing they did in Math 8. Sometimes we used the same methods of teaching that the regular program did. And this made me feel disappointed that we had to sort of go back to doing more question and answer type teaching. And maybe it's just the age group. They were content to work out of a textbook and do questions. But when it came to higher level thinking, it was a waste of their time, they felt. (Interview with Leslie, June 29, 1993, p. 28)

I think there were a lot of disappointments--there were some things that happened but the type of clientele we attracted really stood in the way. It deterred from what we wanted to accomplish. (Interview with Laurie, July 7, 1993, p. 3)

The actual classroom teaching was probably not vastly different from what I was used to other than trying to implement the mastery learning concept. (Interview with Lyn, June 24, 1993, p. 5)

I feel we are not doing anything new or different at all--we've just made problems for ourselves. (Log, October 26, 1992, p. 6)

We are afraid that we are establishing ourselves as the 'alternate' school--this was not our vision for the program at all. We are far behind where we want to be because of the tremendous learning and behaviour difficulties. (Log, October 29, 1992, p. 7)

The pressures of "instant success" were also evident:

The program needed to be given more time, just as we would with any developing student. You can't say, 'You've got one year and then we're going to cut you off. Failed.' It's totally against the whole system of life long learning. It should be, 'No, okay, you haven't met with your goals yet so you continue your life long learning.' (Interview with Sam, July 8, 1993, p. 34)

This pressure for "instant success" may have contributed to the "facade."

### "Facade"

There is some evidence that the L.E.I.F. Program had a "public face" that differed somewhat from the reality of the situation. At no time was this more evident than when the "Video Journal of Education" (producers of a series of professional videos on education) visited the program in December, 1992:

I have serious concerns about the V.J.E. coming in to visit us--especially this quarter when we are doing math and are the least innovative yet. We can act out this aura of wellness but, really, when it comes down to it, how much innovation is really there? (Log, November 30, 1992, p. 13)

We have finished our V.J.E. preparations and I must admit, I think the situation will be quite contrived. (Log, December 1, 1992, p. 14)

While the "Video Journal of Education" did come and film the L.E.I.F.

Program, the team has been too embarrassed to find out if the footage was

actually used or not. Further, the data suggest that the team was sensitive about having outside visitors come to the program:

We didn't feel we could have visitors because, as I say, we didn't know what the kids were going to do. As I mentioned before, the program wasn't the way we wanted it. I mean, we were just trying to keep discipline and sometimes things weren't as creative as we would have liked them to be. (Interview with Leslie, June 29, 1993, p. 31)

It is acknowledged that the intent did not fit the reality:

I think we achieved in each area that we set out to but not to the idealistic extent that we had hoped to. So I think gains were made to a greater or lesser extent in each area but not the way that we had all hoped would happen and I think that would have taken a number of years to get to. (Interview with Lyn, June 24, 1993, p. 2)

Further, although the survey of staff, students and parents was done, the effects of the innovation on student outcomes was not adequately tested:

We didn't really find out if the kids felt that the integration was relevant or that they perhaps learned their social studies better. You know, how do you test your hypothesis that integration is motivating or interesting for the kids? So, we really didn't do that and it's something that we should look at in the future. (Interview with Lyn, June 24, 1993, p. 7)

In many ways, the L.E.I.F. Program was different from what it had originally set out to do. With the passage of time, the program was blunted and a facade of wellness was created in response to the many unanticipated problems that the program faced.

### Positive Outcomes

It would be unfair to say, however, that there were no positive outcomes from the L.E.I.F. Program. Keeping students in school is one positive outcome:

I think that students who would never have stayed all year have completed a full year of school. (Interview with Morgan, June 30, 1993, p. 12)

Some of the kids that we had were the type that just don't make it-- they're kicked out of classes. There were several in our program that it's incredible that they were still coming to school all year. In the regular program they wouldn't have lasted because teachers wouldn't have tried all the alternatives for them because some of these students were not the most cooperative, politest, nicest. We tried to bring out the best in them and they were able to be maintained in school. (Interview with Leslie, June 29, 1993, p. 16)

There were a few that I know for sure I would have considered 'at risk' coming into the high school, not 'at risk' academically so much but 'at risk' being subject to peer pressure, by being filtered off in the wrong group. And this program provided a very comfortable transition for them from the smaller elementary with reduced teacher contacts to coming into a building of 1500 kids. (Interview with Sandy, July 5, 1993, p. 4)

We came for the students and I think that the students have been better helped by being in our program . . . They've learned that, yes, they can get here, yes, they can stay here, yes, there are people who care about them and know that they can do their work. (Interview with Morgan, June 30, 1993, p. B1)

Mastery learning is also cited as a positive outcome of the L.E.I.F. Program:

And in some cases I observed that there were students, who had been largely unsuccessful academically, who developed a sense of self esteem in achieving standards at 80 percent and were quite proud of themselves and developed more of an 'I can do' attitude that they didn't have before. (Interview with Sandy, July 5, 1993, pp. 3-4)

We have achieved incredible results with some students--students who had full time assistance before they came to us and got Bs. Now that's an incredible accolade, I think, for the program. One student told his mom, 'You know, I'll never be happy with a C+ again.' (Interview with Morgan, June 30, 1993, p. 12)

We did start to enjoy the successes of kids that never before reached 80 percent and their faces when they got it was just wonderful. Kids that were just, quote, 'in LA math' that have never done math with their classmates that passed Math 8. They got C+s and Bs. A real credit to them. (Interview with Leslie, June 29, 1993, p. 16)

I think there has been a significant change in the students that we've had. The fact that they, as a whole, not every individual, but as a group, they tend to a) expect more of themselves, and b) that they can achieve more than they're used to and that's because of mastery learning. I think that those are probably the two biggest things that they, whether they realize it or not, they have received--higher expectations of themselves and higher opinion of what they can achieve because of mastery learning--the fact that we had high expectations of them and that we gave them the opportunity to achieve that. (Interview with Lyn, June 24, 1993, pp. 20-21)

There is evidence, too, of personal changes in the team as a result of these successes:

The teachers in the team have experienced big change because we'll all take things with us from the program to our teaching in the future. (Interview with Lyn, June 24, 1993, p. 21)

We will continue to seek out opportunities to expand on what we have begun in this program. Mastery learning is too valuable to let go and we will continue to seek out opportunities to team because we have found it to be very worthwhile. (Presentation to the Board of School Trustees, May 11, 1993)

Despite the positive outcomes derived from the L.E.I.F. Program, the problems were too overwhelming. It was determined in May 1992 that the program would not continue. Some reasons are cited:

Well, they said there was no budget for it, the cutbacks in education will not warrant such a program. They said our numbers are down which is frustrating . . . I think they brought up the 'richly staffed' bit again and that they weren't able to put us all back into the program . . . And, you know, we weren't able to market the program because we were just too busy doing what we had to do, the day to day thing. (Interview with Laurie, July 7, 1993, p. 16)

For the team, non-continuance was disappointing:

I'm feeling disappointed. I would have liked to have seen it go on. Ya, so I feel a bit of disappointment about that. (Interview with Lyn, June 24, 1993, p. 28)

I know that when we were told it wasn't going to go, grief, there was grief, there was all sorts of emotion, and there still is . . . I sometimes think that we haven't done grieving yet for the program and we should look at that. But, I still think it was well worth it. (Interview with Morgan, June 30, 1993, p. B2)

### **Summary of Findings**

The L.E.I.F. Program case is an example of the difficulties faced while trying to implement an innovation from the "ground up." The problems are compounded when the proposed change is pervasive and goals are not clearly articulated or are prone to internal doctrinal inconsistencies as in the L.E.I.F. case. Further, the difficulties in defining a clear process for proceeding in an innovation of this kind must be underscored.

This study has also demonstrated that innovators may lose their identity during implementation. As unanticipated difficulties emerge, classroom practice becomes less congenial to previous or intended practice. This potential loss of identity must be recognized in innovative efforts so that the



appropriate level of support may be provided to the individual teacher. Further, the study has shown that implementing difficulties may be compounded by the team's lack of requisite skills and knowledge to confidently continue with the innovation, resulting in reversion to more traditional methods of teaching. Role overload and excessive personal costs are also well documented.

Difficulties linking the innovative "subsystem" with the more permanent system of the school and district are also documented. Structural, cultural and constituent linkage problems are cited throughout the study and illustrate the problems encountered when a subsystem lacks status in the permanent system. The absence of formal linking mechanisms meant that linkage problems were not resolved, contributing greatly to implementation difficulties. Further, the L.E.I.F. Program was unable to make its intent clear and therefore build a base of support.

A significant finding from this study is the danger when innovators too easily blame their implementation difficulties on the constituents or the contextual variables. This may cause them to overlook the flaws of the innovation itself. In addition, there is evidence to suggest that innovators may lower their expectations for the program to fit the implementation difficulties while the constituents hold fast to what was "promised," leading to the added problem of unmatched expectations.

The importance of leadership support, monitoring and feedback is also emphasized in this study. Further, it is shown that even visionary leaders who appear to be supportive during the adoption of innovations may lose their interest and abandon the innovation if they have taken on too many competing projects at once. Innovators must be assured that their innovation is a high enough priority to warrant on-going support; and leaders must be aware of taking on too much change at once. Another danger associated with the leaders' "stand back" approach to innovation lies in their underestimate of the implementing requirements. This inevitably leads to frustration for both innovators and leaders.

The L.E.I.F. case clearly demonstrates how unanticipated problems can be debilitating to innovators. There is evidence of program blunting and reactionary "seat of the pants" responses to the difficulties. The demands for instant success contributed to the "facade" that the program was perhaps better than it really was. If there is one major lesson to be learned from the L.E.I.F. case it is that large scale, pervasive change is very difficult to implement. There are limits to the amount of change that can be successfully embraced at one time.

## **CHAPTER FIVE**

### **CONCLUSION AND RECOMMENDATIONS**

The conclusions from this study confirm much that is written in the literature on educational change: Implementing innovation is an interactive and highly complex process (Charters & Pellegrin, 1972; Fullan, 1991; Huberman & Miles, 1984; Smith & Keith, 1971). Given the numbers of critical variables involved and the cruciality of each one, it is then no surprise that true educational reform rarely happens.

The first part of this chapter is dedicated to conclusions drawn specifically from this case study, with supporting literature references. The second part of the chapter offers a model for the implementation of educational change based on the findings from this study and related literature. And finally, the third section of this chapter is a synthesis of the conclusions drawn in the form of a set of recommendations for future practice.

#### **The Essential Components of Change**

The findings have shown that the L.E.I.F. Program was unsuccessful for a variety of reasons stemming from problems related to personal fit; doctrinal inconsistencies and lack of clarity; poor structural, cultural and constituent linkages; and absence of active leadership support. From these

findings the essential components for educational change are identified and categorized into four sections: (1) the personal fit of change, (2) the nature and quality of the innovation, (3) favourable contextual variables that include societal and organizational features, and (4) leadership commitment to change. The major conclusion presented is that the absence or weakness of any one of these essential components will doom the innovation to failure. This underscores an important point; namely, that the essential components for change are interactive and highly dependent in nature. In addition, each essential component consists of a complex myriad of sub-components that may further impact the success of any innovation. The L.E.I.F. Program case has much experience to tell about how these essential components of educational change impact implementation.

As noted, the literature on educational change has, in the past, put emphasis on different components: the "technical" view of change emphasizes the nature of the innovation yet often neglects the personal aspects of change (Cuban, 1990; House, Kerins & Steele, 1972; LaRocque, 1986; Wideen, 1993); the "political" view of change recognizes group and personal aspects but may neglect the nature and quality of innovations; the "cultural" view of change acknowledges the contextual and personal components but, once again, may overlook quality of innovations; and the more recent "individual teacher" view faces the risk of underemphasizing the contextual components of change.

Some authors have long since recognized the interactive nature of these components (Smith, Keith, Prunty & Dwyer, 1986; G. White, 1990). This researcher concludes that effective change embraces all of these components equally and that one risks success in the innovative attempt by neglecting any one of them.

### **1. The Personal Fit of the Change**

Guiding questions for this study included, "To what extent does 'personal fit' of the innovation play a role in adoption and implementation?" and, "Do the motives for adopting innovations have an influence on the success of implementation?" Personal fit dimensions explored in this study include personal orientation toward change; motives for adoption; scope of the innovation and the process for proceeding; cost-benefit analysis for involvement; and requisite skills and knowledge of the innovation. Conclusions are drawn from each dimension separately.

#### **Personal Orientation Toward Change**

Personal efficacy is an important requisite for embracing change (Guskey, 1988; Larson, 1991; McLaughlin & Yee, 1988). The L.E.I.F. Program team of teachers possessed efficacy; that is, they believed that they could positively impact the learning outcomes of their students (Guskey, 1988). This manifested itself in their "ground up" response to the "Year 2000"--they voluntarily developed and implemented the L.E.I.F. Program, a

program they believed would improve student outcomes. It is significant to note, however, that as the ambitious L.E.I.F. Program faced more and more implementing difficulties and vocal criticisms emerged, the original team efficacy was displaced by insecurity and the fear of loss of reputation, resulting in loss of efficacy and the desire to proceed as planned in that implementing context. Kozuch (1979) and Giacquinta (1975) document this unwillingness to proceed with the innovation. Giacquinta makes this comment from his study of a "failing" innovation:

Moreover, of clear and major importance was the fact that the originally receptive teachers became unwilling to carry it out. (p. 109)

Figure 3 depicts this phenomenon as it relates to the L.E.I.F. Program. This loss of efficacy underscores the need for realistic change, and support with implementing difficulties and criticisms; otherwise the innovative experience can be as debilitating as it was for the L.E.I.F. team.

A question that came to this researcher's mind was whether or not this efficacy could be permanently lost as a result of failed innovative programs. It is concluded that the motives for adoption play a pivotal role here . . .

### **Motives for Adoption**

As noted, the team had "problem-solving" (Huberman & Miles, 1984) as their main motive for adoption; that is, they conceptualized the new program as improving student outcomes. Further, there was an amazing amount of belief and ownership in the program, most likely because of this

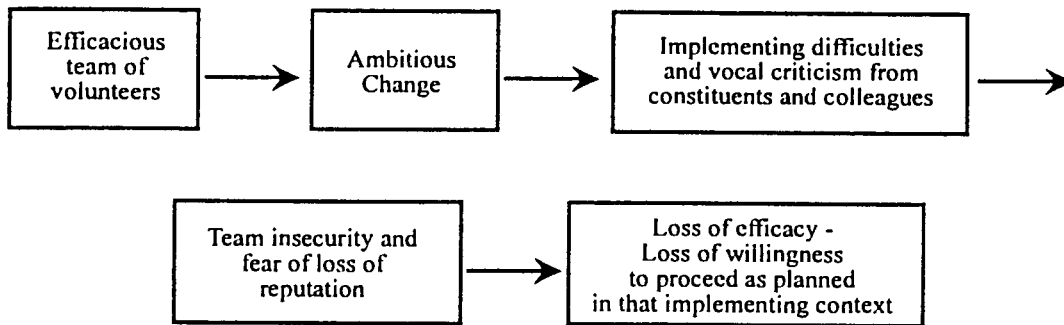


Figure 3. Loss of Efficacy in Ambitious Change Efforts

problem-solving emphasis and since it was developed by the team. Emotional need for change may also have had a role here as Longo (1983) notes:

If the idea takes hold at all, there appears to be a rush to praise its virtues. The response seems to be predicated upon the hope that a change in the way we do things will bring about better results. It is the emotional need as much as the idea itself that attracts a following. Whatever the cause, there seems to be an initial acceptance based on a desire to believe the promise of the new approach or technique suggested. (p. 400)

Hoffer (1951) employs the term "true belief" in describing this motive for adoption--a motive that holds zeal and enthusiasm for the remedial effort.

The ramifications of "true belief," however, is significant. As Figure 4 shows, large scale programs with "true belief" as the motive may cause innovators to place blame for implementing difficulties on the lack of contextual components (no administrative support, poor structural, cultural and constituent linkages) and not on the problems inherent in the innovation itself. As a result, the team, believing that the program intent has not been disputed,

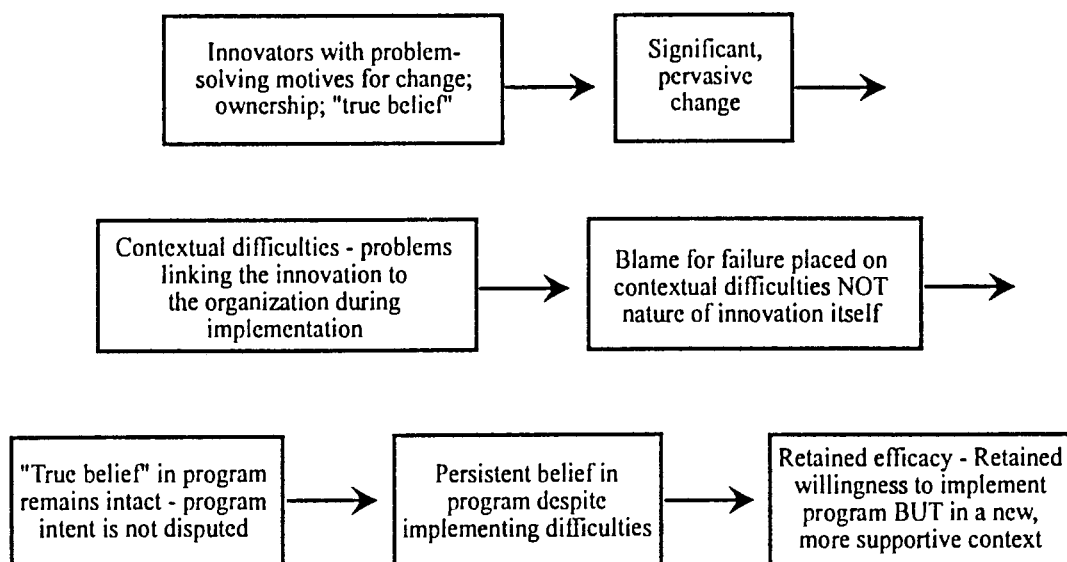


Figure 4. The Ramifications of "True Belief" (Hoffer, 1951).

continue to believe in it. This may be an important factor in explaining why the L.E.I.F. team continued to believe in the program despite the tremendous obstacles they faced. The team expressed the view that they were not given the opportunity to do what they felt would work in practice; therefore, they held fast to the notion that their belief would be confirmed in practice. This led Morgan to dream of the school staffed and built from the "ground up" that would make the L.E.I.F. Program work.

The significance of persistent belief is great and may help to explain why we reform again, again and again (Cuban, 1990): In blaming lack of success on the absence of essential contextual variables, innovators may be overlooking the flaws of the innovation itself. This has serious consequences



for those "true believers" who may seek out new opportunities to prove their innovative programs. And it also leads to an interesting conclusion: Where "true belief" exists and there are contextual barriers to implementation, then personal efficacy is not permanently lost since lack of implementing success is blamed on the contextual barriers and not on the integrity of the innovation itself. The innovators remain willing to implement the program but in a different, more supportive context. This researcher has found that the L.E.I.F. Program did not warrant "true belief" given the doctrinal inconsistencies. Further, a lot of blame was placed on the school, parents and students for lack of success, not that those were not critical factors in the demise of the program, but they served to mask the problems inherent in the innovation itself.

### **The Scope of Change and Process for Proceeding**

"True belief" has major ramifications on planning as well. Ambitious programs like the L.E.I.F. Program may be the result of the "zeal and enthusiasm" (Hoffer, 1951) for the remedial effort. The literature cautions about the scope of the innovation indicating that pervasive innovations face particular difficulties (Charters & Pellegrin, 1972; Fox, 1992; Huddle, 1987; Larson, 1991; Leithwood & Montgomery, 1973; Longo, 1983; Smith & Keith, 1971; G. White, 1990). As White notes:

. . . as the level of complexity increases the degree of implementation decreases. (p. 211)

Part of the reason for this is role overload (Charters & Pellegrin) and this overload is documented in the L.E.I.F. case as the team tried to cope with the many daily implementing requirements and difficulties. There was also evidence that the team experienced identity crises from becoming different kinds of educators than they had been before or had anticipated being. The potential for identity crises is significant and must be underscored in educational innovation. Joyce and Showers (1982) have noted that the practice of innovators gets much worse before it gets better--this is why coaching and support for the individual innovator is critical. Figure 5 depicts the relationship between pervasive change and individual identity crises. This study demonstrates that the more pervasive the innovation, the more unfamiliar the situation becomes and the more problems that are generated, making the innovation less congenial to intended or previous practice. The result is increased insecurity and loss of identity. It is therefore concluded that effective educational innovation must (1) attend to the pervasiveness of the innovation to minimize role overload and identity loss and (2) provide support so that the individual can better align the innovation to intended practice.

Further, pervasive change is more difficult to plan as the data and literature suggest (Charters & Pellegrin, 1972; Fullan, 1991; Huberman & Miles, 1984; Kritek, 1976). Sarason (1971) emphasizes that there must be an honest assessment of the real possibility of implementing the change effort.

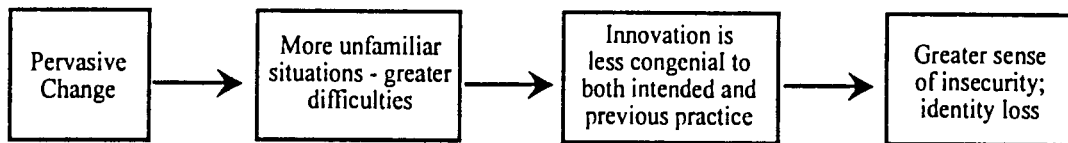


Figure 5. Pervasive Change and Loss of Identity.

Charters and Pellegrin (1972) and Kritek (1976) warn of the dangers of inadequate planning. The L.E.I.F. Program data suggest that planning is made even more difficult and is more likely to be inadequate if the innovative program is developed from the "ground up." The data cite heavy time demands and excessive amounts of energy required for the team to develop, market and implement the program on their own. This drain on resources adversely impacted the team's ability to place personal meaning to theoretical components of the program, to effectively communicate program intent, and to deal with problems. Perhaps if the team had access to a similar innovation, the time and energy demands may not have been as great since they would not have had to "reinvent the wheel." The time and energy required to build programs from the "ground up" cannot be overlooked, and in the L.E.I.F. Program, this drain on resources resulted in inadequate planning. Figure 6 shows how "ground up," pervasive innovations can lead to inadequate planning, emphasizing once again, the need for support and a reasonable scope of change.

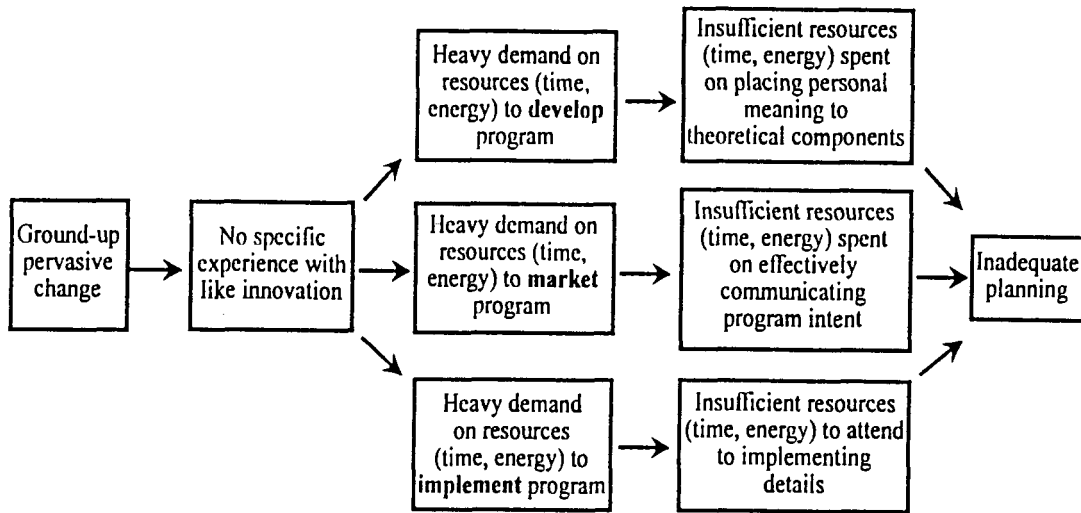


Figure 6. "Ground-up," Pervasive Change and the Problem of Adequate Planning.

The team acknowledged that they were ill-prepared and that aspects of the program should have been "phased in":

We now recognize the importance of 'phasing in' the critical components of our program to make the process more manageable and effective. Change cannot happen at once; it is a 'process, not an event.' (Interim Report to the Ministry, December 9, 1992, p. 7)

This, once again, makes the case for smaller increments of change.

### The Personal Cost-Benefit Analysis

Further, the personal costs associated with pervasive change are many, as the L.E.I.F. Program data suggest. Showers (1987) and Fullan (1991) have observed that teachers feel incompetent and inadequate in change situations.

This insecurity and identity loss has already been noted. Smith and Keith (1971) note the frustration and anxiety associated with change that is not going

as expected. This, too, is documented in the L.E.I.F. case. Hall (1979) notes that innovators have personal concerns in the initial stages of implementation and this, too, was evident in the L.E.I.F. case as members of the team questioned the impact of the program on their professional reputation.

Another aspect of the personal costs associated with change is the emotionality attributed to the frustration of trying exceptionally hard and yet failing miserably. Further, the sacrifices of family and personal wellness was also documented in this study. The personal costs associated with the L.E.I.F. Program, therefore, outweighed any personal benefits mentioned in the data. It would have been interesting to observe if the magnitude of these personal costs would have prevailed had there been a second year of implementation.

### **Requisite Skills and Knowledge**

The lack of knowledge utilization in innovative attempts is well documented in the literature (Crandall et al., 1986; House, 1976; Miles, 1980; Smith & Keith, 1971; Tye & Tye, 1984; Wideen, 1993). The L.E.I.F. Program was no exception. This study has found that where there is pervasive change and increased incidences of unfamiliar teaching situations and subject areas, resources (time and energy) are spent on the day to day implementing requirements, leaving few, if any, resources for continued skill acquisition and knowledge gain. The result is that the innovators rely on intuition and past experience and not "best knowledge," increasing the opportunity for program

modifications and blunting (see Figure 7). Crandall et al. (1986) note the reliance on "experiential knowledge" (p. 29) and make the case for additional resources and support so that teachers can acquire the knowledge and skills they need. While improving knowledge and skill acquisition would have benefited the L.E.I.F. team, it is argued that the scope of the change was too large and the numbers of components requiring additional skills and knowledge needed to be reduced to make it more manageable. There is a limit to the amount of skills and knowledge a person can absorb and implement effectively at one time.

**Summary.** In the L.E.I.F. case, the team had a close personal fit to the intent of the innovation since they played the double role of program developers and program implementers. The problems associated with too close a personal fit to program goals must be underscored. Although it could be argued that the team benefited from a positive orientation toward change, commitment, efficacy and problem-solving motives, this was overridden by the difficulties they encountered from their ambitiousness. The change that was embraced in the L.E.I.F. Program was so pervasive that it was not adequately planned, managed or effectively implemented. The result was personal debilitation stemming from individual identity crises, costly personal sacrifices, and a lack of requisite skill and knowledge to effectively deal with the problems. The impact of these difficulties is significant and underscores

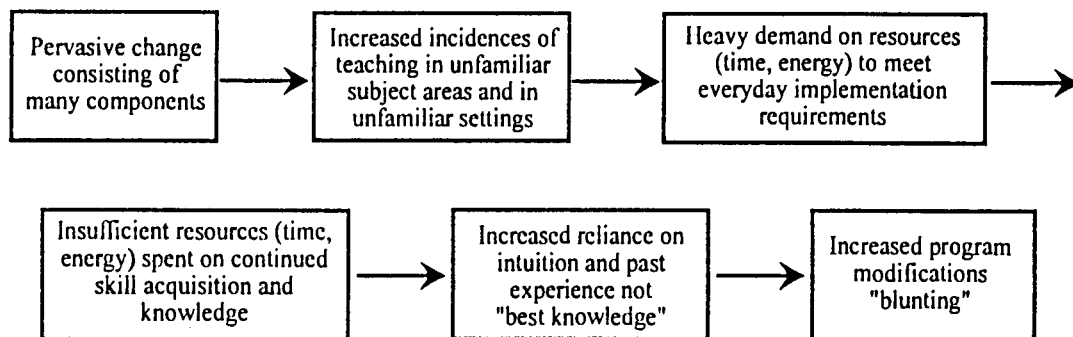


Figure 7. Ramification of Lack of Requisite Skills and Knowledge in Innovative Efforts.

the danger that may be presented when innovators are too closely fit to the "dream" of the innovation. Further, lack of success was blamed on the contextual barriers of the innovation and not on the integrity of the innovation itself. This is a significant finding from the study since it may serve to warn future innovators of the dangers of "blind faith" or "true belief" in innovation --faith and belief that may not always be warranted. As the L.E.I.F. experience has shown, personal fit to the innovation may, at times, be too great when it is translated into change that is too ambitious. Personal commitment and sense of need for the innovation must be tempered by a realistic assessment of what can be accomplished, and this was lacking in the L.E.I.F. case. Once again, this underscores the interactive nature of the essential components of change.

## **2. The Nature and Quality of the Innovation**

This study has found that the L.E.I.F. team placed the blame for their implementing difficulties on the contextual barriers to their program, thereby ignoring the inherent flaws in the nature and quality of the innovation. As noted, this creates significant problems--especially when the innovators sustain their belief in a flawed innovation. The content of innovations is very important (Wideen, 1993), yet it is too often overlooked.

The questions to be examined, as articulated in chapter one were, "What unanticipated consequences and unintended outcomes (Smith & Keith, 1971) can emerge from innovative instructional strategies?" and, "What are the effects of these on implementation?" The unintended problem of doctrinal inconsistencies is dealt with first.

### **The Problem of Doctrinal Inconsistencies**

The flaws that can be found in innovative doctrine have been noted in the literature (Smith & Keith, 1971) and the L.E.I.F. Program was no exception. As mentioned in the findings, there was evidence of doctrinal inconsistencies related to competing goals of process and content; a conflict between differentiated goals and differentiated means in addressing individualized instruction; and unresolved difficulties in maintaining the integrity of each discipline while integrating subject matter. The ramifications of these inconsistencies on program success must be emphasized and this study



concludes that if the inconsistencies of the L.E.I.F. Program and the larger "Year 2000" Program (of which it was a part) are any indication of the flaws to be found in innovative doctrine, then innovators have not paid enough attention to addressing these inconsistencies.

Further, if innovations were put to a consistency test prior to implementation, then many implementing problems would be eliminated. Another method of minimizing the doctrinal inconsistencies and resultant implementing difficulties would be in attending to the scope of the doctrine to be implemented since a major conclusion drawn from this study is that the larger the innovation, the more problems that will be faced. A further conclusion drawn from the L.E.I.F. Program is that the consequence of unresolved inconsistencies is significant: There may be greater dissatisfaction among constituents who align themselves to a particular side of the inconsistent doctrine only to find that it cannot be delivered to their expectation. Evidence of this in the L.E.I.F. Program was in two sets of particularly vocal parents who were very critical that the program did not deliver what it had "sold." Figure 8 depicts the relationship between large scale innovation, inconsistent doctrine and constituent dissatisfaction.

### **Conceptual Clarity**

The problem with general, abstract and theoretical program statements has been noted in the literature (Charters & Pellegrin, 1972; Fullan, 1991;

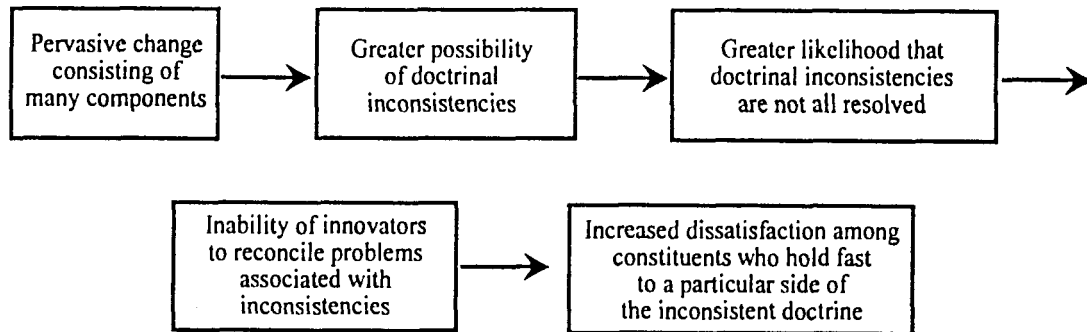


Figure 8. The Relationship Between Pervasion Innovation, Inconsistent Doctrine and Constituent Dissatisfaction.

Smith & Keith, 1971). In the L.E.I.F. Program, the respondents themselves noted that initial conceptualizations of the program were quite theoretical. Further, it was noted that some members were more acquainted with the "theory" than others, indicating that there were varying levels of understanding. The personal meaning applied to innovations is problematic, especially when the innovation is multi-faceted like the L.I.F.E. Program. This study has already concluded that a smaller innovation combined with clearer, more internally consistent goals will result in fewer implementation difficulties stemming from lack of clarity and constituent dissatisfaction when the program cannot deliver what it has sold. Of equal importance is implementing an innovation that is technically sound and based on successful practice (Huddle, 1987; Ornstein & Hunkins, 1988). House (1976) goes further to recommend that innovators have access to a similar innovation while

Joyce and Showers (1982) emphasize the importance of coaches that are expert in the innovation.

It is concluded, therefore, that the L.E.I.F. team would have improved concept clarity had they a smaller innovation with clearer, more internally consistent goals combined with access to a similar innovation or an expert to coach them. What happened was that the team was implementing a large, ill-defined program with no program model and no one to coach them closer to their original intent. When innovators are left on their own to implement theoretical innovations, the result is program blunting as was seen in the L.E.I.F. case. It would be ridiculous to ask someone to drive a car without first giving them lessons, yet, in the L.E.I.F. case, the team drove their car while knowing few of the specifics about driving and while having no driving instructor. The importance of having experienced support in attaining intended goals is essential, and that is precisely what was lacking in the L.E.I.F. case. This researcher is now wary of situations that involve individuals playing the double roles of program designers and program implementers, especially in multi-faceted innovation. The designers as implementers can too easily "redefine" the goals of the program to fit what is actually occurring (Smith & Keith, 1971) rather than what was intended, resulting in program blunting as was evident in the L.E.I.F. case. Figure 9 depicts this relationship.

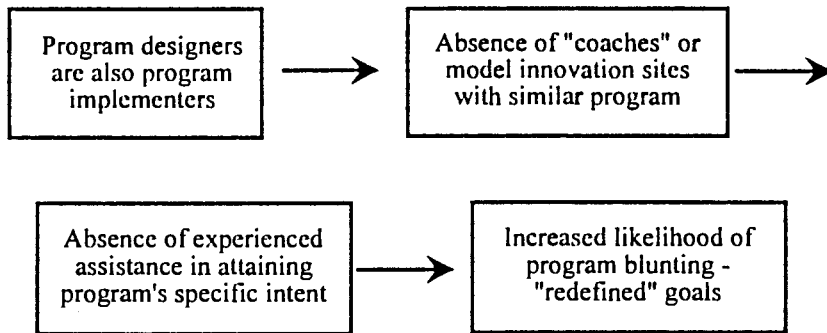


Figure 9. The Impact of Innovators Playing the Dual Roles of Program Designers and Program Implementers.

### Unanticipated Problems With Innovative Features

It is interesting to note that the innovations that the L.E.I.F. team was trying to implement required very tight linkages; for example, curricular integration combined with teaming. The experience of the team, however, centered around loose linkages, since each came from a background of working in isolation in a classroom. The literature tells of the orientation of the "autonomous professional" (Coleman & LaRocque, 1987) and it would be interesting to pursue how much impact this lack of experience with tight linkages had on the difficulties the team faced in coordinating their efforts.

Orlosky and Smith (1972) warn of the risks associated with integration attributed "partly to cognitive strain on the faculty, partly to upsetting the expectations of pupils and consequent parent distrust, and partly to faculty mores which tend to become stronger when threatened with change" (p. 414).

As noted, the team was under pressure from parents and departments within the school to cover all the prescribed curriculum. The subject integration that the team wanted to implement involved examining the critical learnings of each subject to make valid connections. This was impeded, however, by the pressure to include all details of the curriculum and the inexperience of the staff with some subject areas such that the critical learnings could not be easily identified. This was a problem that was not anticipated by the team until they faced the implementing reality and it underscores the difficulty with varying understandings of what is meant by "maintaining the integrity" of the subjects when we speak of integration. The conflict over "covering content" and "connecting the critical learnings" as they are applied to subject integration was not resolved for the L.E.I.F. program and it has been observed by this researcher that the larger "Year 2000" did not have a consensus on this either.

Another innovative feature that presented unanticipated problems was found in the nature of teaming. This is not to say that there were not benefits from teaming. Figure 10 points out the benefits of learning new approaches to curriculum and students through collaborative teamwork. In addition, interview data confirmed that the collegiality of the team is what kept them going through the difficult times. Another important benefit of teaming found in this case study was that there appeared to be an improved opportunity to have students' and teachers' styles matched through the choice of individuals

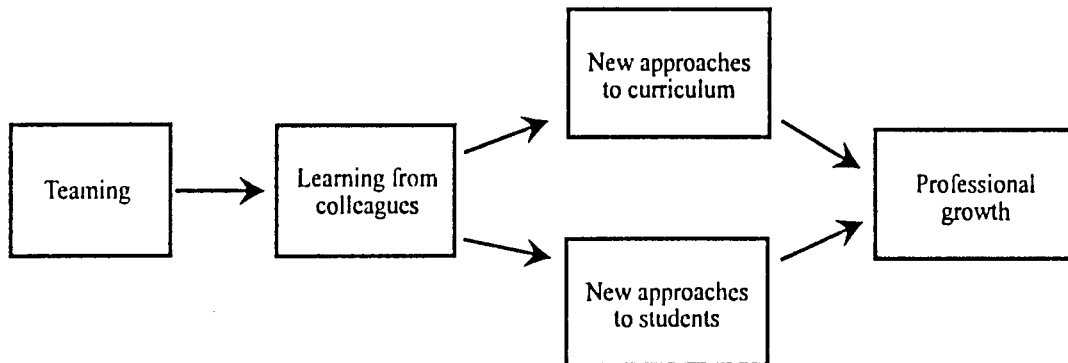


Figure 10. The Benefits of Teaming.

presented by a team. This researcher has observed, however, that a team of varying styles also brought with it varying definitions of neatness, noise and distraction levels, and effective behaviour management strategies that were not always in alignment with one another (Smith & Keith, 1971). Further, the "randomness" of some team members and the "concreteness" of others sometimes caused frustration; at other times, it presented the opportunity to solve a problem from a different perspective. The L.E.I.F. experience, therefore, concludes that the different personalities that comprise a team can be both beneficial and frustrating. Figure 11 depicts this interaction. For the L.E.I.F. team, however, these differences were not debilitating because of the exceptional egalitarian relationship of the team and mutual respect. Each team member was prepared to "give and take" for the team effort:

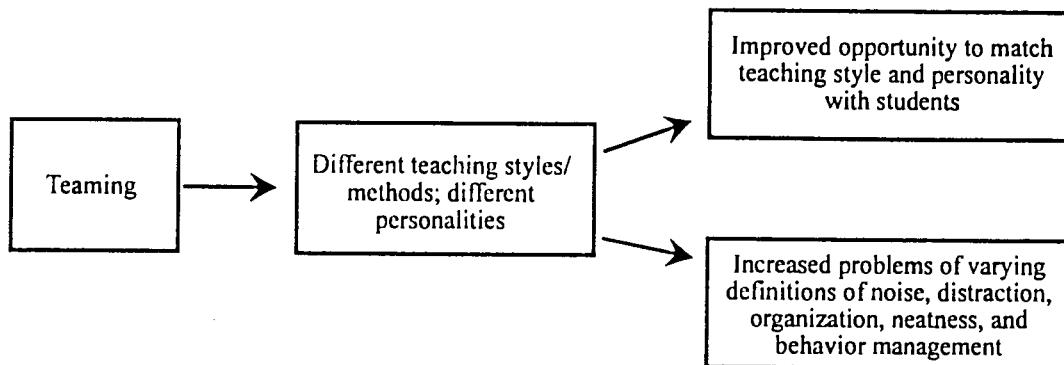


Figure 11. Teaming: The Merging of Different Individuals.

Removing hats is Leslie's issue not mine, but the rest of the team will enforce it because it is important to her. (Log, October 5, 1992, p. 1)

For teams that do not have this level of mutual respect, the varying personalities could quickly lead to conflict, fragmentation and debilitation.

A further difficulty of a team situation that must be emphasized lies in the problems of coordinating the actions of the team. As noted, this was a persistent problem throughout the planning and implementation phase. The interdependence and sophisticated forms of coordination and mutual adjustment have been identified in the literature (Smith & Keith, 1971) as have the demands of new roles, attitudes and behaviours associated with teaming (McLaughlin, 1976). It is noted that all of this contributes to an increased need for group decision making to address the problems and demands of implementation, and this takes inordinate amounts of time (Smith & Keith, 1971). The findings have noted the difficulties faced by the team in finding

the time to have team meetings; moreover, difficulties are noted when one team member is absent, since decisions are considerably weakened by lack of mutual adjustment to the decision. Further, there was the added problem of having to take the time to inform the missing member of the decision made, and when this was done hastily or when there was no time to share the decision, this resulted in a lack of coordination, consistency and follow-through. This lack of consistency had severe ramifications in student, parent and team frustration and confusion.

As these coordinating difficulties persisted throughout the year, the team blunted the program by choosing more traditional means of coordinating their efforts. This is noted in the choice to have four team members do the same lesson for four groups of students even though the favoured approach was to have one person do the lesson and have the others coordinate their efforts to support the concepts being taught. Figure 12 illustrates the problems associated with increased need for coordination in teaming. This researcher has observed that these difficulties were not fully appreciated by the team prior to implementation, even though the planning phase also presented coordinating difficulties. It was as if the team expected these coordinating difficulties to be worked out as they gained experience. Charters and Pellegrin (1972) note the dangers of ignoring such difficulties with the hope that they will disappear



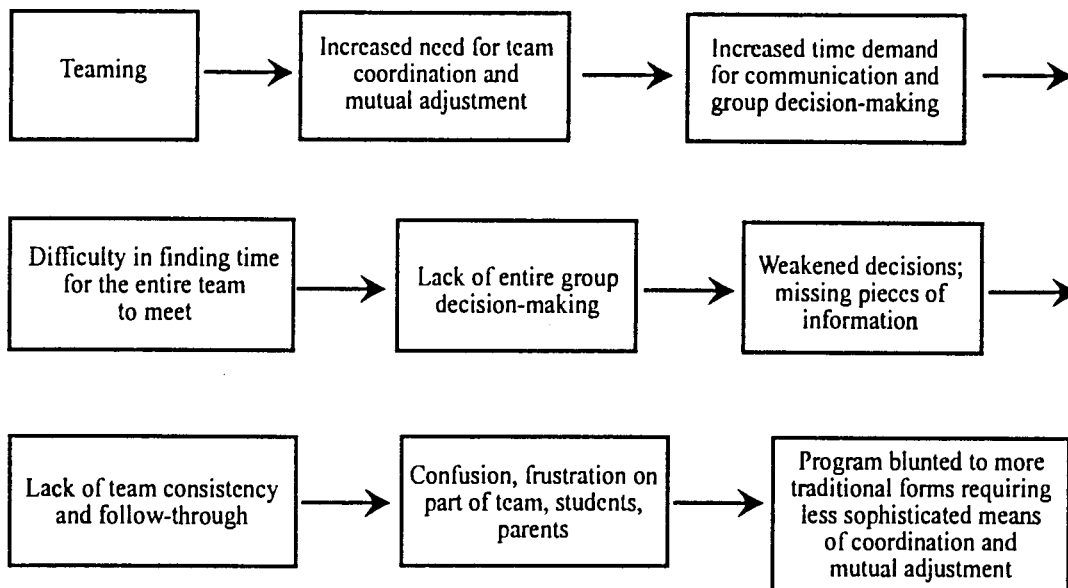


Figure 12. The Problems Associated with the Increased Need for Coordination in Teaming.

with implementation. This, in itself, underscores the importance of facing problems head on and not ignoring them in educational innovation.

The unanticipated difficulty associated with other innovative features found in the L.E.I.F. Program have been noted in the findings. The problems of keeping parents informed about mastery learning and in aligning the reporting system with the school reporting system are well documented. It is observed that the team had not adequately prepared themselves or the students or parents for mastery learning, and this created a great deal of difficulty for them during implementation. Further, the difficulties in aligning the reporting systems with the school system was not even anticipated in advance. It would seem that with more thought during the planning phase, this could have been

anticipated. This illustrates the importance of anticipating as many problems as possible in advance, so that strategies to deal with them can be outlined before implementation begins.

**Summary.** The L.E.I.F. study has affirmed Smith and Keith's (1971) observation that innovators must be very careful about inconsistencies in their innovation doctrine. This study has concluded that two ways to improve doctrinal consistency is by awareness and careful examination prior to implementation, and the adoption of a smaller, clearer innovation. The ramifications of inconsistent goals has been shown in the L.E.I.F. case through the dissatisfaction of constituents (parents and students) who aligned themselves to sides of the competing goals only to find that they could not be delivered. Further, the benefits of smaller, clearer, more internally consistent innovations is emphasized in this study. It is also found that the L.E.I.F. team would have benefited from having access to an expert "coach" who could assist with the quality of the innovation and better prepare the team to handle the difficulties that would arise with the innovation. A major conclusion to be drawn, therefore, is that it is ill advised to have program designers play the dual role of program implementers without this monitoring, since the temptation to blunt the program and redefine it according to what is happening is too great.

### **3. The Impact of Contextual Variables on Innovation**

This section explores two main contextual variables: (1) the societal context and (2) the organizational context. The significance of societal influences as a contextual variable in innovation was not fully appreciated at the outset of this study. The organizational context, however, had these guiding questions, "Where pervasive change exists and the 'organizational fit' (Huberman & Miles, 1984) is poor, what systems linkages are required to support the implementation process?; To what extent does 'organizational fit' and systems linkages impact the continuance of innovations?"; and "What role does the context of an organization play in implementation?." The societal context is discussed first.

#### **The Societal Context of Educational Innovation**

The findings note that the "Year 2000" of which this study was a part, was plagued with conflicting values. This finding is significant because it emphasizes the futility of mandating pervasive change (Corbett, Firestone & Wilson, 1987; LaRocque, 1986) that is open to diverging interpretations that threaten people's values about education (Cuban, 1990). It cannot be assumed that there is a common values framework (LaRocque, 1986); when this assumption is mistakenly made, public outcry like that experienced in the "Year 2000" will kill the proposed change. The impact of failed mandated changes on educators cannot be ignored (Wideen, 1993) and this study notes

that the L.E.I.F. team now finds itself wary of sweeping mandated change that is prone to conflicting values on education.

The L.E.I.F. case, typifying a casualty of such ill-informed change, presents two solutions to offset the values conflict associated with change. Firstly, as has been argued already, the proposed change should be of a smaller scale so that any conflicts can be better managed. As this study notes, a lot of problems result from misinterpretations and miscommunication with constituents. Further, a smaller scale innovation would increase the likelihood of a closer values alignment with the constituents since the larger the innovation is, the greater the numbers of values that may be at issue. Secondly, it may very well be that these values conflicts will never be resolved (Cuban, 1990). If this is the case, then perhaps the strategies for attaining goals of equity, efficiency and quality (Mitchell & Encarnation, 1984) in education should be reviewed by asking, for example, whether uniformity in education under the auspices of equity is a goal worth pursuing. It may be argued that equity is best achieved by meeting diversified needs through diversified settings, making the case for more choices in education such that educators, parents and students can align themselves with the program that best accommodates needs and values. This study concludes that the closer the innovation's intent is in alignment with constituent needs and values, the greater the opportunity for program continuance since the constituents form a

special interest group to lobby for continuance. This is what was lacking in the L.E.I.F. case since few, if any, parents or students came to the program's defence when it was threatened with non-continuance (see Figure 13). This study confirms that the difficulty in attaining societal consensus on the values attributed to education is a significant factor as to why educational innovations like the "Year 2000" fail and we keep "reforming again, again, and again" (Cuban, 1990).

### **Organizational Context of Educational Innovation**

The systems linkages are divided into three sections: structural linkages, cultural linkages and constituent linkages. This study shows how important all three linkages are to the change effort. Conclusions drawn from each section are discussed in turn.

**Structural linkages.** As the study notes, the L.E.I.F. Program formed a subsystem of the school through a "school within a school" structure. This kind of relationship requires a heavy reliance on linkages between the subsystem and the more permanent system of the school and the district (Miles, 1964, 1980), and makes the subsystem dependent on the permanent system (House, 1976). When the subsystem is lacking in status or has an indeterminant place in the organizational structure of the permanent system (as was the case in this study), this perpetrates perceptions that the subsystem is an appendage to the permanent system and therefore in direct competition with

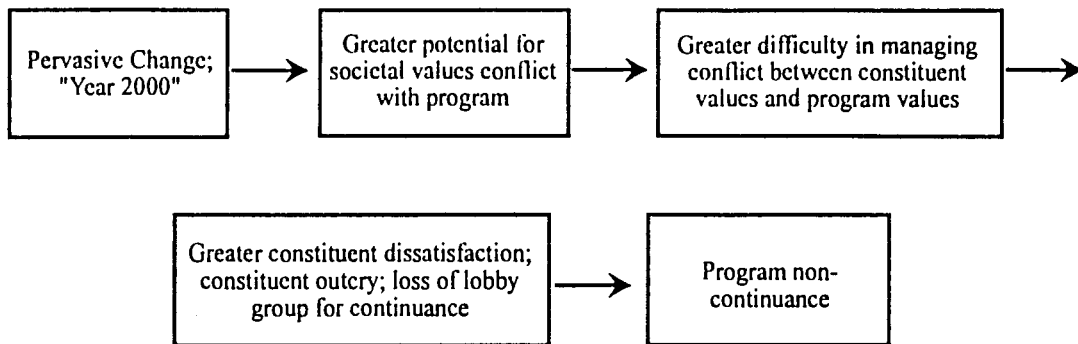


Figure 13. Values Conflicts and the Problem of Continuance.

it. The ramifications of this perception to the subsystem is severe, since, as was discovered in the L.E.I.F. case, the permanent system uses its position of power to impose restrictions on the subsystem to minimize the competition and conflict between the systems. The findings note specific examples of the school imposing its influence on the L.E.I.F. Program by restricting funds and access to resources and forcing compliance to reporting systems including marks and attendance. Further, because of this lack of status, there was an absence of formalized mechanisms for negotiating and effectively communicating with the school. This study notes the inability of the team to effectively manage miscommunication and deal with the skepticism of those departments within the school that viewed the L.E.I.F. Program competitively.

The conclusion to be drawn here is that when a subsystem organization is used in educational innovation, the place of the subsystem in the larger,

more permanent system must be established clearly by all players in advance to minimize the perceptions of competition and favouredness. Further, formal linking mechanisms must be established for the subsystem to clarify its intent to the permanent system (see Figure 14). This is not to say that the permanent system should not impose its influence on the subsystem; indeed, there may be times when the subsystem needs to be reminded of contextual boundaries; however, there is a problem when the permanent system imposes its influence in a reactionary and uniformed way because of the absence of these formalized linking mechanisms as in the L.E.I.F. case study.

**Cultural linkages.** Parkview Secondary School, as a large secondary school, fits Weick's (1976) description of the "loosely coupled system." Hall, Rutherford and Huling (1984) and Joyce (1982) have noted that these kinds of organizations make sustaining any innovation difficult. Teachers tend to identify with their departments first, not the school, and Herriott and Firestone's (1984) "logic of confidence" prevails with individual teachers resenting any interference with their professional autonomy. This rather "isolationist" view (Coleman & LaRocque, 1990) makes Parkview Secondary a school with few common goals, despite recent attempts by new administration to attain goal consensus. There are no norms of continuous improvement or collaboration (Little, 1982), resulting in a teaching staff that, generally speaking, does not value change.

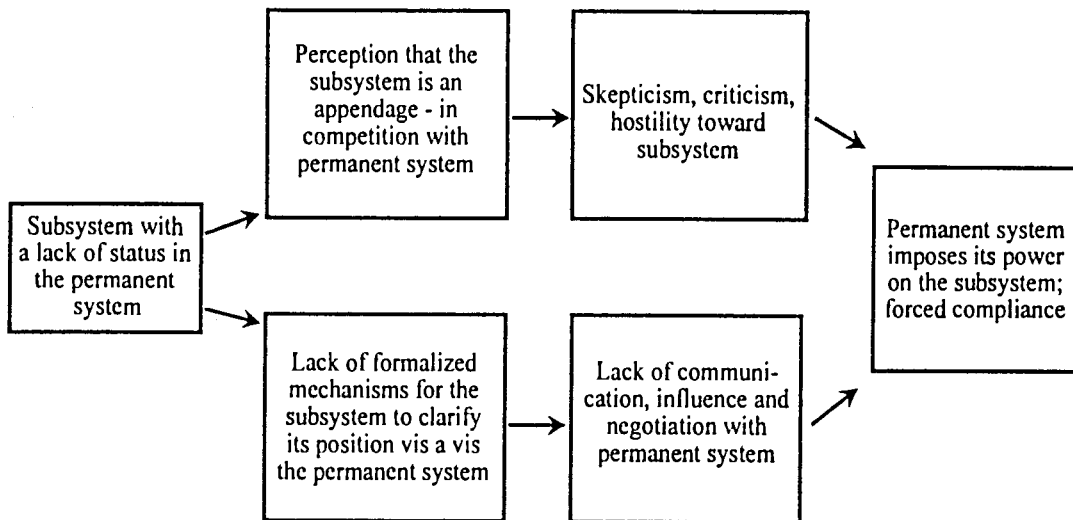


Figure 14. Problems Associated With the Subsystem's Lack of Status.

The impact of this rather negative cultural context on the L.E.I.F. Program is significant since it motivated the L.E.I.F. team to form their own positive subunit ethos that could embrace change, thereby fulfilling an emotional need at the same time. The end result, however, was demoralizing because the lack of value placed on the innovation by colleagues led to opposition and the team becoming suspect as their motives for embracing change were called to question. This study suggests that people will question the motives of innovators because they analyze them from their own motive base. Those who feel disempowered to change education and have a reduced sense of personal efficacy will interpret the innovators' motives to be that of career or reputation gains, not a sincere attempt at improved educational



outcomes. This is important since detracting comments may be easier to take if the innovators appreciate why their motives are suspect. As Sam is quoted in the findings, "risk taking is valued by those who take risks themselves" (Interview with Sam, July 8, 1993, p. 16). Other reasons for a lack of value placed on the L.E.I.F. Program by colleagues was the threat that the team presented to those who fear change or who are complacent. As Sandy notes, "any time people are faced with change they will shoot at the knee cap of people promoting change" (Interview with Sandy, July 5, 1993, p. 2). Figure 15 depicts the relationship between detractors and innovators.

Organizational climate is also noted as significant in this case study.

The stress of having to deal with job action and the trial of a colleague on top of the stress of implementation is noted. Further, it is acknowledged that the school had embraced other forms of significant change. Hearn (1972) warns of the impact of strikes and other emotion-laden crises on innovation while Crandall et al. (1986) and Corbett and D'Amico (1986) warn of the strain of taking on too much change at once. In the L.E.I.F. case, the potency of climate is illustrated and the team, at times, did not know whether the criticism of parents was the result of their efforts as much as it was the negative climate that permeated the whole district and province.

Unfortunately, sometimes these climatic factors cannot be foreseen as in the case of job action and the trial of a colleague; however, embracing change in

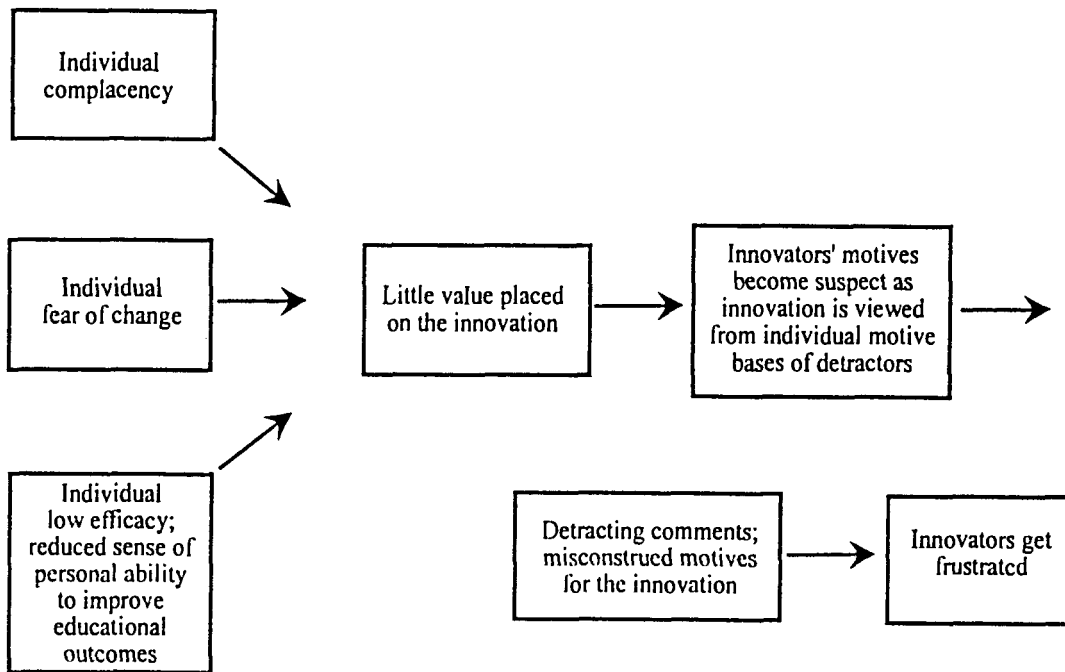


Figure 15. The Relationship Between Detractors and Innovators.

an environment already strained with change was foreseen, pointing to the need for carefully calculating the feasibility of embarking on additional change projects.

**Constituent linkages.** The importance of student fit to the innovation is documented in the literature (Antonelli, 1973; Ornstein & Hunkins, 1988). As the L.E.I.F. case has shown, there was a problem with student fit. The data suggest that lack of heterogeneity of the students was the result of the parents of students with learning and behaviour problems placing their hope in the L.E.I.F. Program as a different educational experience. When the

program could not deliver what was sold, however, because of this poor fit with students, there is evidence that the team adjusted the program to better fit the students. Difficulties arose, however, when the team did not have the time (nor the inclination) to adequately articulate those changes to parents and students who held fast to what was originally "sold." The result was constituent dissatisfaction and criticism stemming from unmet expectations (see Figure 16). This emphasizes the need for ensuring a good fit between the innovation and the constituents. In the L.E.I.F. case, this would have meant a careful examination of students first and designing the program around their needs. The problem with the L.E.I.F. Program was that it was developed without a specific student group in mind. Further, this case study cautions innovators about the risk of "oversell" in innovations (Fullan, 1991), especially where programs are an option to be elected as in the L.E.I.F. case.

The impact of poor student fit also served to increase the anxiety of parents and students. It has been noted in the literature that students also have concerns about innovation (Fullan, 1991) similar to Hall's (1979) "stages of concern" (Marsh & Penn, 1987-1988). In the L.E.I.F. case, it could be argued that the change in the normal way of learning led to increased student anxiety which led to poorer behaviour (Huberman & Miles, 1984; Marsh & Penn, 1987-1988; Smith & Keith, 1971; Wideen, 1993). The anxiety and

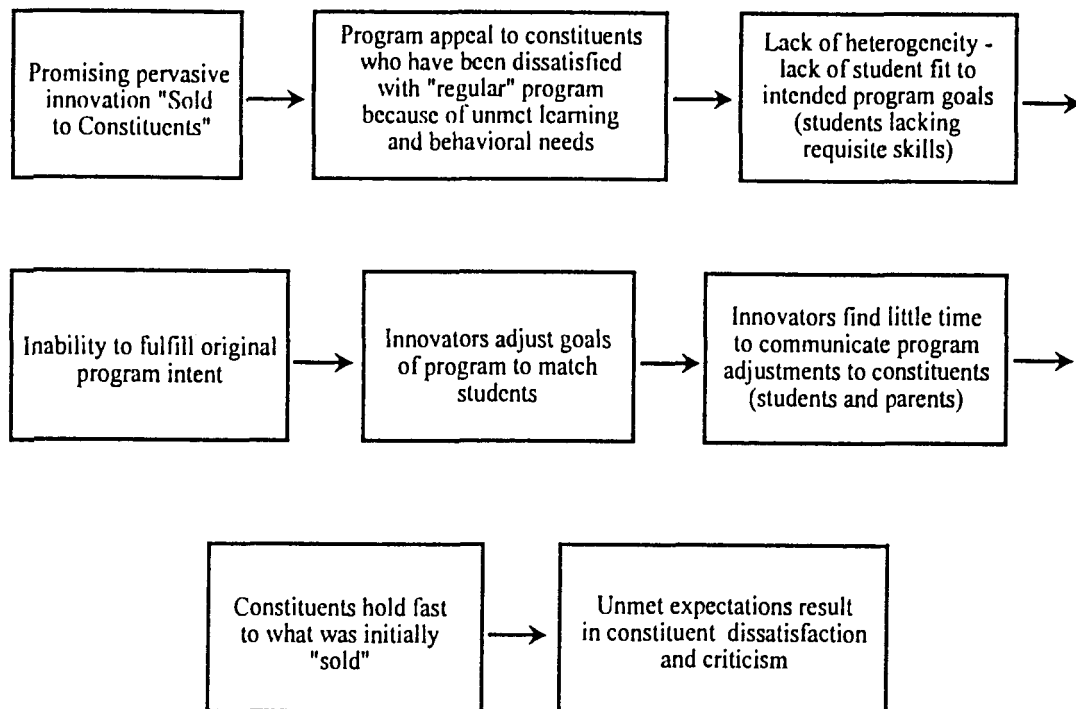


Figure 16. Poor Constituent Fit to the Innovation.

poorer behaviour of students may have led to negative stories going home, resulting in increased parental anxiety and dissatisfaction.

Summary. As noted, the contextual variables critical to change are both societal and organizational. An important problem in the societal context stems from conflicting values. Since the conflict on educational values will not likely be fully resolved (Cuban, 1990), then this underscores the futility in mandating pervasive, interpretive change like the "Year 2000." With regard to the organizational context of innovations, the L.E.I.F. Program illustrates the necessity of a subsystem having structural linkages to the permanent

system through defined status and formalized linking mechanisms. This would have the effect of reducing feelings of competition, miscommunication and misunderstanding. Further, the L.E.I.F. Program illustrates the importance of understanding the cultural context of change with the view that detractors may misconstrue the motives of innovators by looking at them from their own disempowered motive base. Climate is also important, and the dangers of embracing too much change at once is acknowledged. The third organizational variable to be explored was constituent linkages and it was found that constituent fit with the innovation was critical and that constituent concerns about the innovation must also be addressed.

An interesting observation to emerge from the L.E.I.F. case is that a positive subunit ethos is not enough to sustain change; it must be able to endure the pressures and strains associated with the organizational context. This researcher has observed that the team developed a defence mechanism to deal with the pressure and strains of organizational context. This defence mechanism is labelled the "siege mentality," and may be described as the feeling of having to protect one's borders against hostile elements (see Figure 17). The defensiveness of the team, the feelings of persecution and victimization were clearly evident in the L.E.I.F. case and perhaps this is what made it even easier for the team to blame implementing difficulties on contextual features rather than the merits of the innovation itself. Further, this

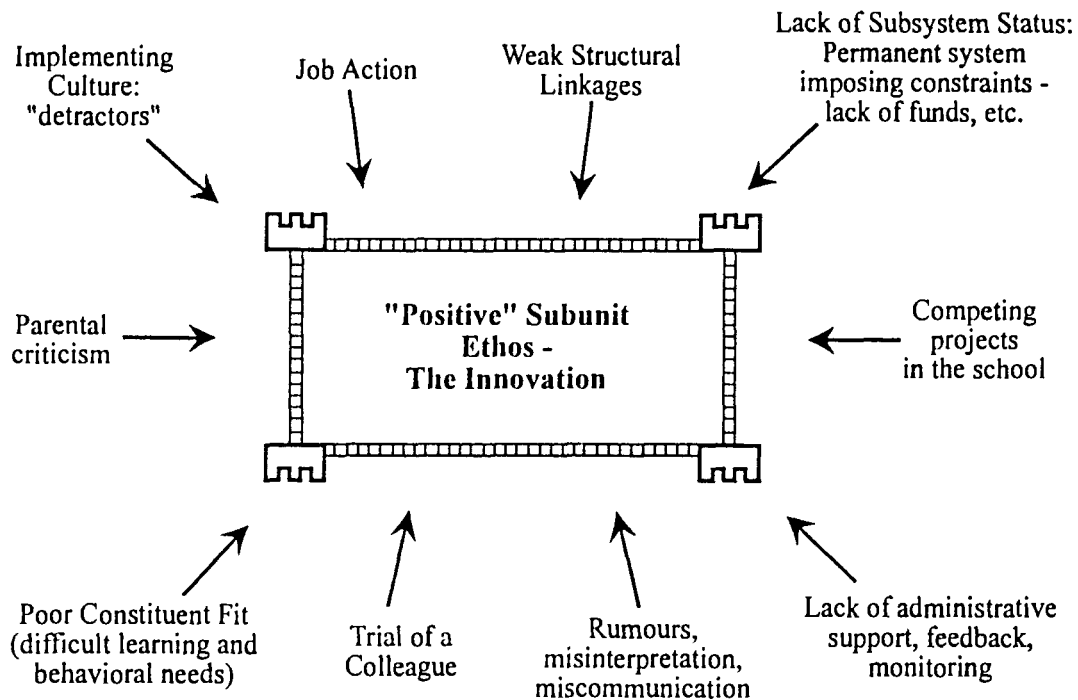


Figure 17. "The Siege Mentality"

siege mentality can fuel "true belief"; when innovators perceive themselves to be the objects of attack, they may more vigorously defend their position. Another interesting aspect of the "siege mentality" may come in increased "facade" for those under attack know full well that it is best to exude an "aura of wellness" and strength to fool the attackers and fend off further invasion. It is important to note, therefore, that organizational context has a potent impact on innovators and educational innovations.

#### **4. Leadership in Innovation**

The findings of this study clearly illustrate the frustration that is experienced when innovators sense a lack of administrative support for their efforts. This section explores the guiding question, "What role does leadership play in the adoption, implementation and continuance of innovations?"

##### **Innovations and Leadership Style**

An important finding of the L.E.I.F. Program is that although a principal may be visionary and have an "initiator" style (Hall et al., 1984), the innovation may still suffer from lack of support. The L.E.I.F. experience found two ways in which this happened. Firstly, it is significant to note that although a principal may have a positive orientation to change, his administrative team may not. At Parkview Secondary School, the administrative team had some individuals who were not change oriented. This led to a lack of consistency in both vision and support vis a vis the L.E.I.F. Program that, in turn, led to inconsistent support and frustration on the part of the team (see Figure 18). As Sam pointed out, it is important to have "an administrative team that supports (the innovation) from the same tenets of planning, communication and consistency. That was not there" (Interview with Sam, July 8, 1993, p. 57). The lack of cohesiveness of the administrative team with regard to the L.E.I.F. Program led to difficulties in attaining the status and structural linkages that were of vital importance to the

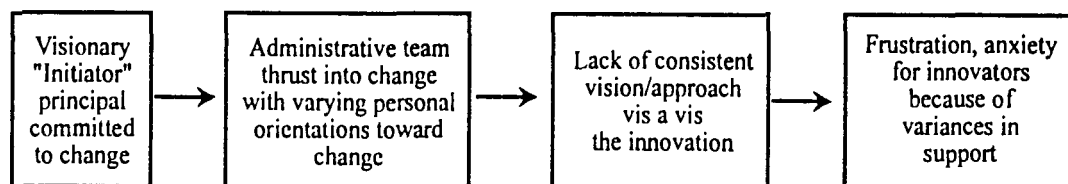


Figure 18. The Effect of the Administrative Team's Varying Orientations Toward Change.

team. As Gross, Giacuinta and Bernstein (1986) point out, "only management has the power to make changes in organizational arrangements that are incompatible with the innovation" (p. 203). This illustrates the importance of having not just the support of the principal, but the support of the entire administrative team.

The second way in which an "initiator" principal may offer little support to an innovation that he/she may have originally sanctioned is due to the problem of completing projects and limited resources (Kritek, 1976). As noted, Parkview Secondary School had engaged in a number of significant changes when the L.E.I.F. Program was being implemented. When simultaneous change projects compete for limited resources (and resources imply more than money: time, and energy are also important resources), the principal will naturally focus on innovations of the highest priority (Finch, 1981). Unfortunately, the L.E.I.F. Program was not high enough on the list to warrant the active support of the principal (see Figure 19). The



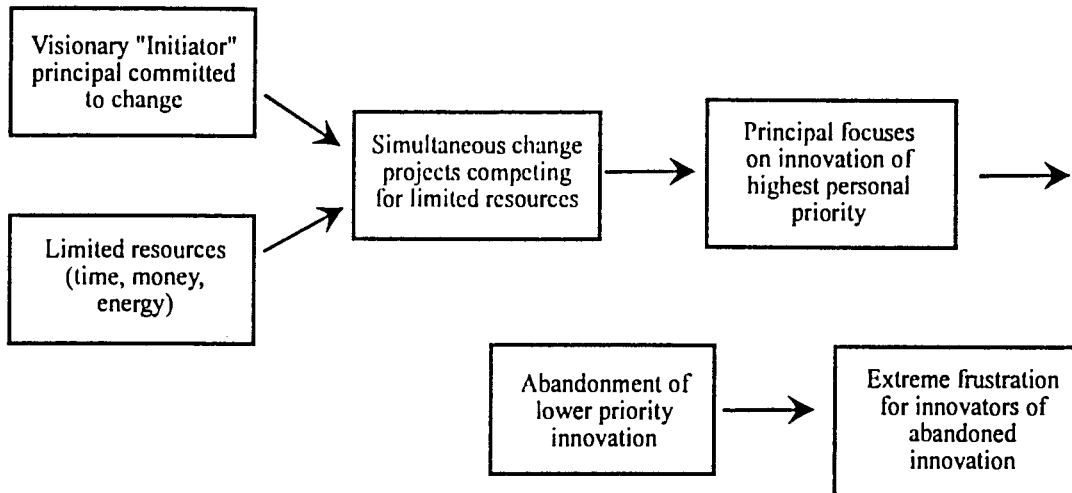


Figure 19. "Visionary" Leadership and the Abandonment of Innovation.

abandonment of educational innovation, however, leads to extreme frustration on the part of the innovators (Arends, 1982; Huberman, 1983; Sivage, 1982). This, once again, serves to caution principals about taking on too much change at once; limited resources must be considered before change is embraced. It also cautions innovators to make sure that the innovation they have adopted is high enough on the principal's list of priorities.

### **Support, Monitoring and Feedback in Innovation**

The literature is full of references citing the need for administrative support, monitoring and feedback in innovation. The need for objective feedback from the leader is noted by Arends (1982), Cox (1983), House (1976), and Huberman and Miles (1984). Further, understanding of the innovation is noted as important by Sivage (1982), and the need for

encouragement and recognition by the leader is cited by both Common (1981) and Corbett (1982a). Corbett also notes that a willingness to get involved in the innovation is important and Arends (1982), Charters and Pellegrin (1972), Gross, Giacquinta and Bernstein (1986) and Sivage (1982) note the importance of forging systems linkages for the innovation. Other forms of administrative support involve developing effective monitoring systems through improved communication patterns with the innovation (Common, 1981; Fullan, 1991) and by providing the necessary resources (Charters & Pellegrin, 1972; Kritek, 1976; Smith & Keith, 1971). Almost all of these forms of support were lacking in the L.E.I.F. case creating tremendous implementing difficulties.

It is important to note, however, that the principal may not be the "all powerful" change agent (Smith et al., 1988). As noted, the "real world of principalship" (Larson, 1991) leaves little room for instructional leadership (Miller & Lieberman, 1982). The role of the principal is complex (Fullan, 1991) and even meeting current demands is difficult enough let alone the demands of innovation (Loucks-Horsley & Roody, 1990); therefore, it is not likely that the principal will have the time to provide all of the kinds of support necessary for effective implementation. This makes the case for a second change facilitator (Hall & Hord, 1987; Loucks-Horsley & Roody, 1990; Loucks & Zacchei, 1983) who would be helpful in forging linkages to the permanent system and in "trouble shooting" for the innovators. The

difficulties of having the implementers do all of this on their own has already been noted, since their responses to problems may tend to be reactive and emotional, especially given the demand for "instant success" (Joyce & Showers, 1982; Longo, 1983), and all of this may contribute to program blunting (Smith & Keith, 1971). The second change facilitator could help temper the reactivity of the innovators and serve the valuable role of coach to the implementers.

In the L.E.I.F. case, this active second change facilitator role existed and was most beneficial prior to implementation; however, once implementation began, the effectiveness of the second change role was diminished. There is evidence in the data to suggest that this is most likely because the principal no longer valued this second role since the L.E.I.F. Program was not a high priority. This emphasizes the point that the second change facilitator cannot give all the support alone. Experience with the L.E.I.F. Program suggests that some areas of support must be given by the principal; for example, providing the means for systems linkages, providing resources, and giving encouragement and recognition.

Another crucial area of support that only the principal can give lies in allotting an appropriate time commitment to the innovation. The literature is full of references citing the futility of embracing and then abandoning innovation before it has had an opportunity to develop fully (Charters &

Pellegrin, 1972; Corbett & D'Amico, 1986; Cox, 1983; Guskey, 1990; Hall & Rutherford, 1976; Loucks-Horsley & Roody, 1990). In the L.E.I.F. case, the team was frustrated and angered by what they perceived was abandonment before they had an opportunity to address their implementing difficulties. Although time allotments committed to exploring innovation would vary given the nature of the innovation, most would agree that one year is definitely not adequate.

The failure of innovators and administrators to achieve a consistent view about the innovation also poses tremendous difficulties for attaining support. In the L.E.I.F. experience, it was found that while the team held the program in the highest of priorities, the principal did not. This meant that the team, because of their high involvement with the program, had a good understanding of the implementing difficulties and the level of support required to deal with them. Administration, on the other hand, had low involvement with the program and therefore underestimated the implementing difficulties and the support requirements (Huberman & Miles, 1984). For the L.E.I.F. team, this was very frustrating since it seemed obvious to them what needed to be done. Likewise, the researcher detected frustration on the part of administration for the "unrealistic" demands that the L.E.I.F. team made. Lewis (1988) notes the varying perceptions on the part of administration and teachers on the amount of support given to innovations. For the L.E.I.F.

Program, this resulted in unresolved difficulties and lack of support (see Figure 20). The problem of varying perceptions of the innovation is significant. Leaders must be careful not to underestimate the implementing difficulties of the innovation. This illustrates the importance of understanding innovations from the implementer's perspective (G. White, 1990). As the researcher's log notes:

There is a real danger when administration passes off the problems of staff as being insignificant, since to the people involved they are very real and important. It is just like the danger of discounting a child's problem that is huge within their frame of experience. (February 23, 1993, p. 25)

### **Leadership Pressure in Innovation**

The literature states that every innovation will experience unexpected difficulties (Fullan, 1991; Glickman, 1987; Huberman & Miles, 1984; Longo, 1983; Smith & Keith, 1971) and the response to these difficulties will be adaptations to either the program or the context depending on the nature of the unforeseen difficulty. Fullan (1991) speaks of "evolutionary planning" while Levine and Ornstein (1985) use the term "organic implementation." McLaughlin (1976) takes a more personal approach to adaptations by saying that innovations must be "mutually adaptive" to allow for personal meaning. The goal, however, in educational innovation should be to keep these adaptations from being "opportunistic" (Huberman & Miles). This is where leadership in innovation can play a critical role: Innovators need someone who

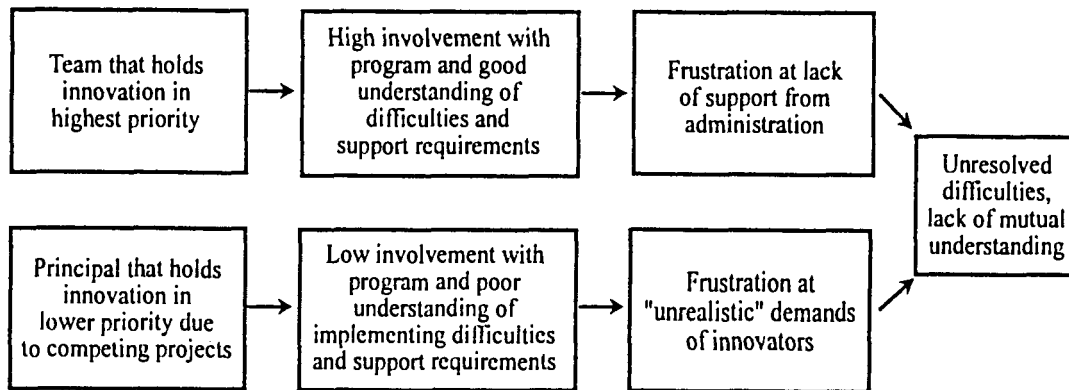


Figure 20. Varying Perceptions of Difficulty on the Part of Administration and the Team.

thoroughly understands the innovation and can assist with implementation difficulties to ensure that the adaptations that are made are not "opportunistic." As mentioned, this is where the second change facilitator or "coach" (Showers, 1987) can play a significant role, and this is what was lacking in the L.E.I.F. case.

As the result of experience with this study, this researcher prefers the "tight end-loose means" approach to educational innovation. The "tight end" refers to having a small enough innovation that the key elements or goals of the program are clearly defined (Crandall et al., 1986) and are screened for internal inconsistencies (Smith & Keith, 1971) combined with pressure from an innovation leader who will give a low latitude for "opportunistic" adaptations. "Loose means" refers to the higher latitude given by the leader to innovators so that they can make adaptations in response to unforeseen difficulties and to

promote personal meaning that will not ruin the "end" result of the program. In the L.E.I.F. case, the adaptations that were made were "opportunistic" because the innovation was too large and pervasive, resulting in the inability of the team to manage all the implementing difficulties. Further, even if the pervasive goals were attainable there was the absence of pressure to ensure that they were adhered to. The "tight end-loose means" approach to educational innovation, once again, makes the case for smaller, more clearly defined innovation (see Figure 21).

**Summary.** It is evident from the literature and the L.E.I.F. experience that successful innovation requires support, monitoring and feedback combined with pressure to ensure that the innovators do not deviate from goals, goals that must be clearly defined and internally consistent. The specific kinds of support are well articulated in the literature and the L.E.I.F. team's frustration at not receiving these kinds of support during implementation warns of the dangers of non-support, especially by principals who are perceived as change oriented "initiators." An important conclusion from this serves to caution principals about embracing too many competing projects. Further, while only the principal can provide some areas of support, there is room for the role of a second change facilitator in educational change. Indeed, the L.E.I.F. program would have benefited from the continued potency of a second change facilitator

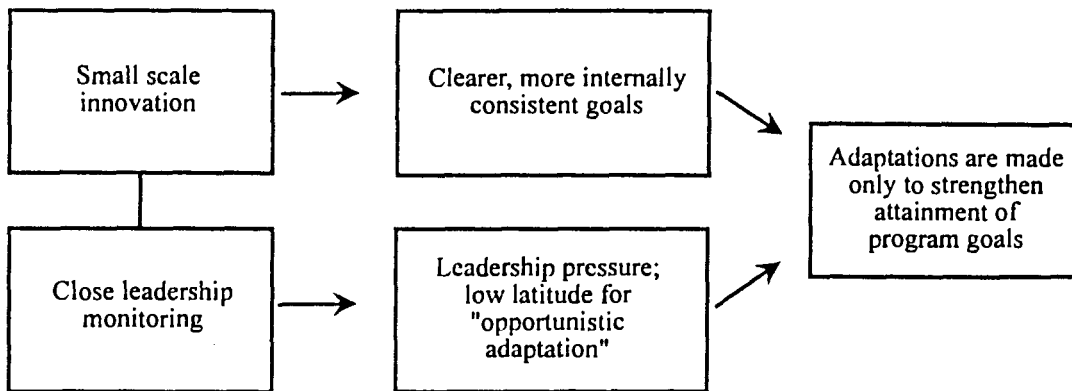


Figure 21. The Combination of Small Scale Innovation and Leadership Pressure.

who could have assisted them with a "tight end-loose means" approach to implementation.

**A Model for Change Based on the L.E.I.F. Experience**  
**and the Literature on Educational Change**

The L.E.I.F. Program has affirmed the complexity of change and the interactive nature of essential components of change. No one component will be sufficient for successful innovation on its own--all components must be present in healthy doses. As noted from the above conclusions, there was the absence of significant portions of each essential component for change resulting in all kinds of difficulties for the L.E.I.F. team. If one overriding difficulty could be identified, however, it lay in the pervasiveness of the change to be implemented. This is a major factor when we examine the



guiding question of "What accounts for the discrepancy between intended outcomes and the real change that is effected?"

The model for change that is derived from the L.E.I.F. experience and the literature on education change resembles a bridge (see Figure 22). The bridge analogy is selected as it highlights the interdependency of the four components found to be essential to change; namely, personal fit; the nature and quality of the innovation; the contextual linkages; and leadership in innovation. An innovation, like a bridge, will fall down any time one of the supporting features is weakened or taken away. The platform of the bridge represents the route of adoption, planning, implementation, evaluation and continuance that leads to the intended outcomes at the opposite end of the bridge. It is significant that personal fit and the nature and quality of the innovation form the pylon base for the bridge, since no innovation can proceed successfully without the solid base of the innovator's commitment to change and a good, quality innovation. The contextual variables that include both organizational and societal linkages and the leadership roles of support, feedback, monitoring and pressure are the spans that hold the bridge up since they are what hold an innovation up. It is also important to note the presence of unanticipated problems and outcomes that are separate and threaten to land on the bridge at any time. This element of uncertainty is what makes implementing innovation especially challenging.

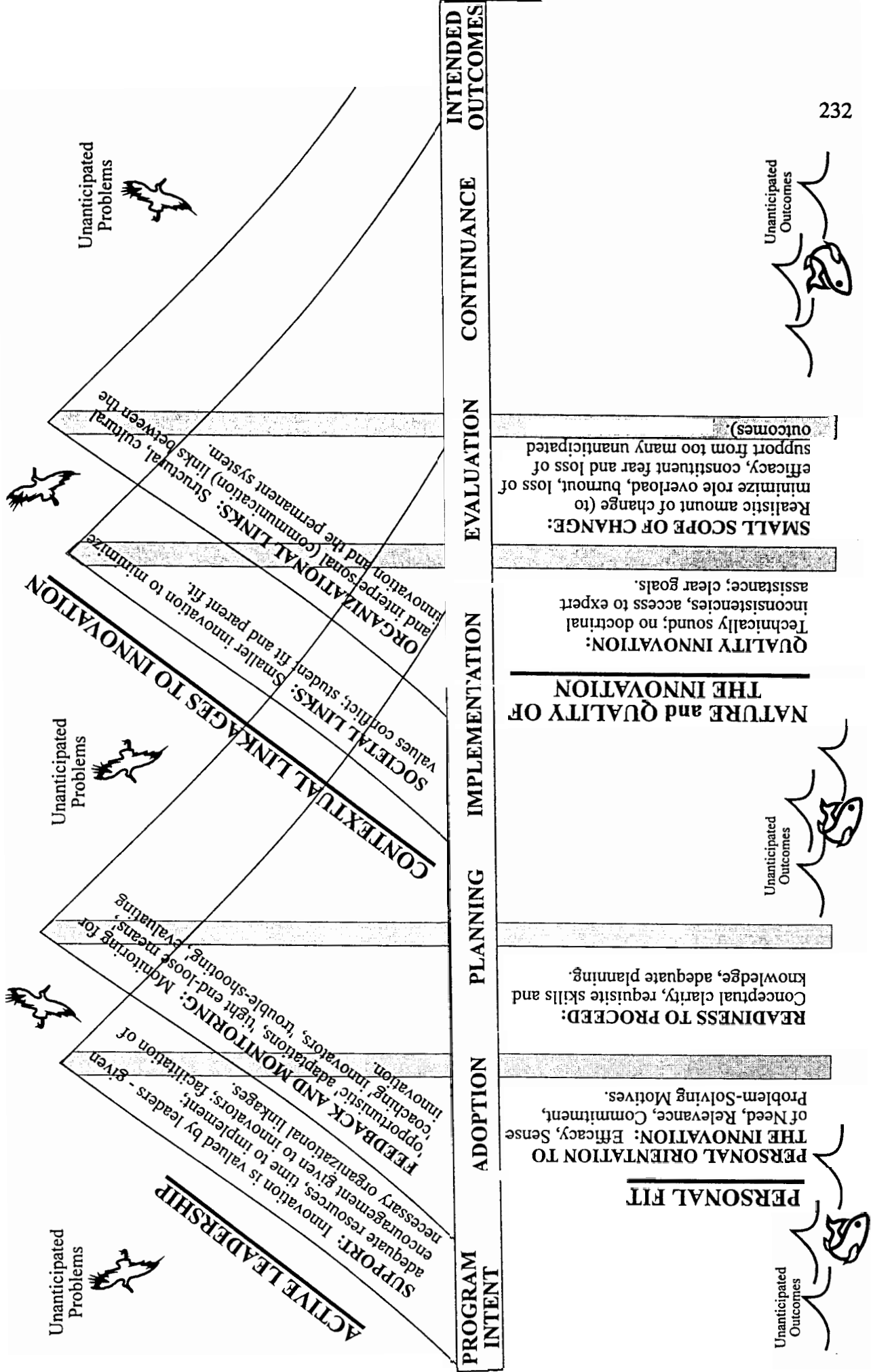


Figure 22. Bridging Intent and Reality in Educational Innovation: A Model of the Interdependent Components of Change

### **Recommendations for Practice**

The L.E.I.F. experience combined with the advice of the literature leads to the following recommendations for practice in the implementation of "ground up" innovation:

1. Start with a small innovation that is clear, technically sound and has been screened for values conflicts and internal inconsistencies.
2. Ensure that the innovators have access to an expert or "coach" who can (1) carefully monitor the innovation for "opportunistic" adaptations, (2) provide support with the requirements of the innovation, and (3) forge formal linking mechanisms with the permanent system. This role can be effectively played by a second change facilitator. Discourage program designers from being program implementers unless they have someone to fill this second change facilitator role.
3. Have a carefully considered plan for implementation that expects the unexpected and is aware of the potential for unintended change through reactivity to unanticipated problems. Screen decisions through the clearly defined intent of the innovation.
4. Assess the commitment of the leadership team in the organization to fully understand, support, monitor and provide feedback to the innovation. Where there are competing projects or when the unexpected drains limited resources, the innovators must be confident that the change is a high enough priority for the leaders to ensure adequate resources. Be wary of the ability of leaders to commit resources when they have embraced a lot of significant change at once.
5. Identify the short and long term resources that are required and get a commitment for them, taking into consideration that unanticipated difficulties will arise that require additional resources of time, money and expertise.

6. Where personal fit is good, watch for "true belief" in the program that may blind innovators from seeing the flaws in the innovation to be implemented.
7. Attend to the personal needs and concerns of the innovators with an awareness that change can bring identity crises, insecurity, and loss of efficacy. Innovators require on-going skill development, expert feedback and encouragement during implementation (as well as the adoption and planning phases).
8. Attend to the personal concerns of the constituents of change; namely, parents and students. It should be acknowledged that they take a risk, too, when they embrace change.
9. Make sure the innovation matches the students it was intended for. It is inadvisable to plan an innovation without knowing exactly who the student targets are first. Innovations should be tailored around specific student needs. Innovations planned without the precise needs of the students in mind are ill-conceived.
10. Where an innovation assumes a values base that may be in conflict with the parents and students, do a poll to assess the degree of values alignment. It is important that most parents and students be aligned with the values base of the innovation. Where it is impossible to gain total alignment, be prepared to deal with possible criticism and conflict. Where values are in alignment, build on that support base.
11. Assess the capacity of the organization to provide the necessary structural and cultural linkages to the innovation prior to implementation. Where possible, forge linkages in advance and where linking problems are identified, anticipate the problems and plan a strategy to deal with them (knowing that there will be some problems not identified). The second change facilitator would be useful here. If the numbers of anticipated problems are great, rethink the feasibility of implementing the innovation in that context.
12. Be realistic--there are limits to the amount of change that can be successfully embraced at once.

Educational change is indeed a complex process. We will be destined to continue reforming again, again and again (Cuban, 1990) unless we appreciate the interactive and dependent nature of the essential components of educational change.

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## Appendix A

Summary of the "Year 2000"LINKAGES BETWEEN PROGRAMS, LEARNING PRINCIPLES, CURRICULUM,  
ASSESSMENT, EVALUATION, REPORTING, AND STANDARDS

PRIMARY PROGRAM 4 years	INTERMEDIATE PROGRAM 7 years (Draft)	GRADUATION PROGRAM 2 years (Draft)
<b>SCHOOL ORGANIZATION</b>		
Nongraded, continuous learning; multi-age grouping or other variations are possible.	A variety of organizations with emphasis on flexibility to support continuous learning	
<b>PROGRAM GOALS</b>		
Attending to all aspects of human development: <ul style="list-style-type: none"> <li>• intellectual</li> <li>• aesthetic &amp; artistic</li> <li>• emotional &amp; social</li> <li>• physical development &amp; well-being</li> <li>• social responsibility</li> </ul>	Attending to all aspects of human development: <ul style="list-style-type: none"> <li>• intellectual</li> <li>• aesthetic &amp; artistic</li> <li>• emotional</li> <li>• physical</li> <li>• social</li> <li>• social responsibility</li> </ul>	Attending to all aspects of human development: <ul style="list-style-type: none"> <li>• intellectual</li> <li>• human &amp; social</li> <li>• career</li> </ul>
<b>LEARNING REQUIRES THE ACTIVE PARTICIPATION OF THE LEARNER</b>		
Teacher and child as partners. Teacher encourages independence and choices from options provided or developed in collaboration with students.	Teacher and students as partners. Students have many opportunities to make decisions; they negotiate learning experiences, forms of representation, and assessment methods from options provided, or developed in collaboration with their teachers.	Students are encouraged to assume increasing responsibility for their learning. Student produces a Personalized Learning Plan (PLP) with a teacher advisor. T.A. monitors student progress. Curriculum may be negotiated in Independent Directed Units.
<b>PEOPLE LEARN IN A VARIETY OF WAYS AND AT DIFFERENT RATES</b>		
Teachers' observations inform instructional planning for individual needs, interests, and abilities.	Students become more aware of their learning strengths and needs, and are increasingly responsible for the form of representing and the pace of their learning.	Students are provided with varying amounts of time appropriate to their needs in order to complete courses of study; courses can be challenged.
<b>LEARNING IS BOTH AN INDIVIDUAL AND A SOCIAL PROCESS</b>		
Teachers' focus is on social interaction and learning to work together with others, keeping in mind that children need to work individually as well.	Teachers ensure that students have a balance of opportunities to work individually and cooperatively.	Focus is on assisting students to attain individual goals and aspirations, while providing opportunities for individual, independent and cooperative learning, and directed studies.
<b>DEVELOPMENTALLY APPROPRIATE PRACTICE</b>		
Considers two criteria: students of this age, and the uniqueness of each.		Student P.L.P., takes into account learning styles and strengths, interests, future aspirations.
<b>A MORE COMPREHENSIVE VIEW OF CURRICULUM</b>		
Curriculum is prescribed in Primary Program documents, and expanded upon in the Resource Document. Eventually, to be more fully described in Curriculum/Assessment Frameworks spanning Primary to Graduation.	Curriculum intentions, for each subject, are prescribed in the Intermediate Program. Also, more fully described in Curriculum/Assessment Frameworks spanning Primary to Graduation.	More fully described in Curriculum/Assessment Frameworks spanning Primary to Graduation. Organized by subject and courses. Organized into subject units, approx. 30 hours each.



## CURRICULAR INTEGRATION

PRIMARY PROGRAM 4 years	INTERMEDIATE PROGRAM 7 years (Draft)	GRADUATION PROGRAM 2 years (Draft)
Strands are implicit; integration is expected.	Strands are explicit; integration, is encouraged	Graduation requirements address all strands. A combination of units, courses, and inter-disciplinary studies.

ASSESSMENT, EVALUATION AND REPORTING  
SHOULD HELP STUDENTS MAKE INFORMED CHOICES

Authentic evidence (observations, portfolios, products, interviews, etc.)  Evaluation informed by: teacher observation, children's products and conversations/conferences, and students' self-evaluations.	Authentic evidence (observations, portfolios, products, interviews, etc.)  Evaluation informed by: teacher observation, children's products and conversations/conferences, and students' self-evaluations.	Authentic evidence (observations, portfolios, products, interviews, etc.) Teacher-determined assessment, possibly in collaboration with student.  Exams: teacher marked and standards set by markers. Final mark moderated by examination boards School-based; has a variety, dependent on tasks. Provincial exam for clusters of unit. Final mark = 60% school + 40% exam.
--	--	--

## REPORTING PROCESSES

(Three formal and two informal reports are required per year)

Descriptions of observations, and written comments that address what students can do, their learning needs, and ways to support further growth and development are included in the formal report; can be discussed during conferences. Anecdotal reports are mandatory.	Legislation provides two reporting options for the first four years: anecdotal reporting or the use of criterion-referenced symbols with written comments. In the final three years, the use of criterion-referenced symbols are mandated. Written comments are optional; conferencing is encouraged.	Student performance and achievement given a letter grade: -A, B, C, or NC. Written comments are optional. Student self-evaluation report is optional. School leaving certificate for completion of PLP + transcript of grades.
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## STANDARDS

Standards are based on characteristics of the educated citizen, statements of goals, principles and policies in the programs, curriculum and reference sets. They are to be used as criteria by which to judge student progress rather than by comparing students against each other. Growth and development is evaluated in light of broadly-based criteria and norms. In this way, the challenge for each individual child is increased and the overall standard for the quality of education is raised. Higher standards are achieved through increased individual achievement and personal goal setting and participation in the teacher-student evaluation process.	Standards are held for students through the completion of graduation requirements that are based both on the future needs of learners as well as on societal expectations. The performance standard held for all students who complete graduation requirements is the image of the Educated Citizen.
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Appendix B

L.E.I.F. Program Survey

PROGRAM SURVEY

Attached you will find the PROGRAM SURVEY to be completed by students, parents and staff.

For identification the following MUST be filled in:-

- STUDENTS - circle under column A----> 0
- PARENTS - circle under column A----> 1
- STAFF - circle under column A----> 2

For example:-

ID NUMBER										SPECIAL CODES										PARENT										STAFF									
										A	B	C	D	E	F	G	H	I	J	A	B	C	D	E	F	G	H	I	J	A	B	C	D	E	F	G	H	I	J
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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PLEASE TAKE NOTE!!!

- \* Use only pencil. For best results, use the pencil that makes the darkest marks yet erases easily for changes. No pen or felt pens please - they cannot be read by the tabulating scanner.
- \* Avoid making stray marks on the survey form.
- \* Erase completely when changing a response.
- \* Mark answers within the allotted space.
- \* Please do not staple, fold, bend or smudge survey form.
- \* PLEASE MAKE SURE THE "SPECIAL CODES" AREA IS FILLED IN INDICATING WHETHER YOU ARE A STUDENT, PARENT OR STAFF MEMBER.

Don't forget to mark on the back of the form your comments on:

- (a) The strengths of the Program at this time.
- (b) Areas needing improvement.
- (c) Any practical suggestions you have.

ID NUMBER										SPECIAL CODES									
										A	B	C	D	E	F	G	H	I	J
1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9

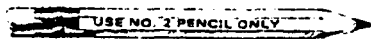
PROGRAM SURVEY

The questions below ask you to consider if the Program provides and/or contains: .....

ON THE BACK OF THIS FORM PLEASE ADDRESS:  
 (a)The strengths of the Program at this time. (b)Areas needing improvement.  
 (c)Any practical suggestions you have.  
 \*\*THANK YOU.RESULTS IN JUNE NEWSLETTER\*\*

DISAGREE STRONGLY	E
DISAGREE	D
NO OPINION	C
AGREE	B
AGREE STRONGLY	A

GENERAL PURPOSE DATA SHEET II  
 form no. 19542



1. A variety of engaging learning experiences.	----->	A	B	C	D	E
2. All the assistance necessary for student success.	----->	A	B	C	D	E
3. For differences in learning rates and needs.	----->	A	B	C	D	E
4. Opportunities for subject integration.	----->	A	B	C	D	E
5. Stresses social, physical, artistic and intellectual goals.	----->	A	B	C	D	E
6. Clear articulation of learning outcomes to students.	----->	A	B	C	D	E
7. High expectations for students to attain personal best.	----->	A	B	C	D	E
8. Positive pupil/teacher relationship.	----->	A	B	C	D	E
9. Facilities which adequately support learning.	----->	A	B	C	D	E
10. A balanced heterogeneous group of students.	----->	A	B	C	D	E
11. Fair and valid assessment and evaluation of learning.	----->	A	B	C	D	E
12. District Administration who are supportive of this program.	----->	A	B	C	D	E
13. School Administration who are supportive of this program.	----->	A	B	C	D	E
14. Teachers who promote life-long learning.	----->	A	B	C	D	E
15. Connections between learning and real life experiences.	----->	A	B	C	D	E
16. Teachers who model and encourage "risk taking".	----->	A	B	C	D	E
17. Teachers who are committed to professional development.	----->	A	B	C	D	E
18. Emphasis on responsibility and consequences for behaviour.	----->	A	B	C	D	E
19. Consistent teacher practice in behaviour management.	----->	A	B	C	D	E
20. A positive environment in which to learn.	----->	A	B	C	D	E
21. Teachers who make students feel good about themselves.	----->	A	B	C	D	E
22. Encouragement for students to get involved in the school.	----->	A	B	C	D	E
23. Teachers who try to provide the best learning opportunities.	----->	A	B	C	D	E
24. Good use of community resources, eg. field trips, speakers.	----->	A	B	C	D	E
25. More parent contacts, eg. phone calls, individual meetings.	----->	A	B	C	D	E
26. A good selection of elective courses.	----->	A	B	C	D	E
27. Effective communication through Newsletters and meetings.	----->	A	B	C	D	E
28. Report cards which effectively relate student achievement.	----->	A	B	C	D	E
29. Effective and useful formal Parent/Teacher interviews.	----->	A	B	C	D	E
30. Effective communication of program goals and intent.	----->	A	B	C	D	E
31. The Program has had a successful first year.	----->	A	B	C	D	E
32. I would like to see the Program continue next year.	----->	A	B	C	D	E

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## Appendix C

### Interview Schedule

#### Doctrine Clarity

Thinking back to the days prior to the implementation, what was it that the L.E.I.F. Program set out to do?

- how did that make you feel?
- in what ways were these goals attained? unattained?

#### Program Adoption

Why did you get involved in this program?

Did you feel you were ready for the implementation of this program?

#### Personal Fit

Thinking back on the day-to-day functioning of the L.E.I.F. Program, was it similar to what you would normally do in the classroom?

Was the L.E.I.F. Program what you had expected prior to implementation?

Did you believe in the program? Do you believe in the program now?

Would you implement a program like this again?

#### Organizational Fit

How did you perceive the school to view the L.E.I.F. program during implementation?

Was this what you had expected prior to implementation?

How did you perceive the district to view the L.E.I.F. program during implementation?

Was this what you had expected prior to implementation?

What was the association between the L.E.I.F. Program and the school? district?

Tell me about resource allocation for the program.

### **Innovative Features**

What do you consider to be the innovative features of the L.E.I.F. Program?

How do these make you feel?

Tell me about your experiences in working with a team.

- strengths?
- weaknesses?

Describe the pupil-teacher relationships found in the L.E.I.F. Program. Were they what you had expected?

Describe the parent-teacher relationships found in the L.E.I.F. Program. Were they what you had expected?

How did the L.E.I.F. Program develop individualized instruction?

Tell me about how the L.E.I.F. Centre worked as a facility.

### **Outcomes**

What educational change was effected through the L.E.I.F. Program?

What personal change have you experienced as a result of your experience in the L.E.I.F. Program?

Was this what you had expected?

If you were to do this again, would you go about it in the same way?

### **Leadership**

Describe the support you received from:

- school administration
- district administration

What did you perceive school administrators (district administrators) to think of the L.I.F.E. Program as you look back on the past year?

Describe the monitoring you received.

Describe the feedback you received.

### **Broad Unstructured Questions**

What were the highlights of the L.E.I.F. Program?

What were the disappointments of the L.E.I.F. Program?

What would you do differently next time if you were given another opportunity to implement the L.E.I.F. Program?

What would you do exactly the same?

If I was an observer, what would I see on a typical day in the L.E.I.F. Program?

How do you feel now that it is over?

What happens next?

### **Probes**

How did that make you feel?

What did you think about when that happened?

What else in this situation caught your attention?

What impression did that make on you?

What impressed you most about \_\_\_\_\_?

What gave you that impression?

What did you know about \_\_\_\_\_ at that time?

Had you ever experienced anything similar to this before?

What did that bring out?