TOWARDS A NEW APPROACH FOR SCHOOL SYSTEM EVALUATION

by

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Dedication

With love and humility, I sincerely dedicate this thesis to my family: my wife, Irene, my daughter, Nancy, and my son, Clyde. Their continued patience, perseverance,support, suggestions, corrections, encouragement, and tolerance throughout these past years of study played a tremendous part in the success of this endeavour.

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Abstract

The development of a new approach towards the evaluation of school systems comes at a time when questions of accountability are being directed at the public school system. District school boards and administrators are being pressured to ensure that school systems are responsive to the needs of those they are designed to serve; as a result, increasing demands have arisen for an evaluation process to provide advice and insight to administrators for improvement, change, and growth.

This study posits a new approach to school system evaluation, **the LINC *interactive* Model**. The model is conceptualized from a review of the literature pertaining to evaluation and school systems: educational evaluation literature/models, organizational effectiveness literature/studies, school systems literature/studies, and effective schools literature/studies. Four domains (L.I.N.C.) of thirteen specific components, eclectically identified from the research and ranked according to their permanence, prominence, and frequency in the above sources, provide an evaluation process for assessing school systems. Each of the thirteen components is defined and a checklist/guide given to aid and evaluator in assessing a school system.

An analysis and comparison of the new model with the evaluation models of leading theorists and its application to three of the twenty-eight Nova Scotia school system reviews conducted from 1978-1991 serve as a mirror by which this new approach can be tested. The uniqueness of the **LINC *interactive* Model**, is its focus on the school system as a fundamental social system, operating effectively as a collective entity of all of its interdependent and interactive components, highly specialized and functioning together for common goals.

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I wish to acknowledge, with gratitude, the help and encouragement of my supervisor, Dr. Keith Sullivan, Director of the School of Education. Dr. Sullivan's continual interest in the pursuit of my degree culminated not only in my success but also in his maintaining a perfect record with his graduated students.

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CHAPTER I

An Overview of the Study

Introduction

The theory and practice of education can involve a person in a very large number of different pursuits. Consideration can be given to such facets as instruction (how a teacher teaches), curriculum (how a course of studies can be planned and implemented) or facilities (how a school can be structured). Although this diversity exists within the field of education, there is one aspect -- aside from the orientation towards pedagogical concerns in one form or another -- which should underlie all these pursuits: evaluation. In whatever area of education a person has an interest, there is need for evaluation. In this chapter, the importance of evaluating school systems is introduced against the present day background of rising educational costs and demands for accountability. An overview of the thesis is also given.

Public Concerns Regarding Education and Evaluation

There is a general feeling that school systems are not meeting the challenging needs of students and society, that they are not responsive to the desires and aspirations of stakeholders, and that "the output, for the money spent, [is] most unsatisfactory" (Report on the Public Consultation Process, 1991, p. 12). These are sufficient reasons in themselves to justify a demand for and point out the importance of periodic, comprehensive and objective evaluation. The case for evaluation generally, and for school system evaluation in particular, has increased because of a sense of crisis in public confidence (Phi Delta Kappan, September, 1991). The decline in economic resources has increased the public's sensitivity to education expenditures. Schools are not seen as

places of excellence. School systems are under greater scrutiny and pressure to rationalize cost effectiveness. The concerns regarding high drop-out and literacy rates, poor performance, and shortage of well qualified people for many skilled jobs, produces "a widespread but unfocused anxiety about ... the quality of our education, particularly in primary and secondary schools" (Learning for the Future, 1991). Educators at all levels must now justify their decisions, grasp the complexities of the school system and realize the importance of effective communication and evaluation. While teachers, parents and students (particularly Atlantic Canadians) generally regard their public schools as "reasonably good places" (CEA Gallup Poll, 1989), such confidence, however, as Duerden (1988) states, "must not be permitted to over-shadow the far greater need to continually assess and strengthen the public school systems" (p.2).

Most school systems in Canada are faced with declining enrolments, surplus schools, empty classrooms, decreasing staffs, more militant unions, shrinking budgets and limited fiscal autonomy. Such changes (socially and culturally) have generated annually questions regarding the purpose and worth of the public school system (Halifax Herald, January 30, 1992). Generally these concerns translate into four areas:

(1) **economy** - resources at lowest cost,

(2) **efficiency** - optimum use of resources (Scott, 1981) by achieving greatest output for least input (Mott, 1972),

(3) **effectiveness** - the extent to which goals have been achieved (Rutman, 1980 & Shipman,1979) and the ability to mobilize for action, production and adaptation (Mott, 1972), and

(4) **excellence** - making individuals more accountable (Fisher, 1988).

Shift in Government Priorities

In the present era of declining financial resources and of strong competition for public dollar, there is a vital need for school systems to be more efficient and effective. Changes in economic growth and in government/public priorities have shifted the focus from education to other functions in society. In Nova Scotia, for example, education which once enjoyed the highest priority among the gross expenditures of government, has for the past five years, ranked second to health care (Table 1.1).

Table1.1: Province of Nova Scotia Estimated Gross Expenditures by Function

Health	$1,299,725,000	(27.7%)
Education	1,053,149,000	(22.5%)
Debt	842,521,000	(18.0%)
Others (Social Services, Transportation, Resource Development, Public Protection, etc.)	1,492,420,000	(31.8%)
Total	**$4,687,815,000**	**(IOO%)**

[Budget address by the Hon. Greg Kerr, Minister of Finance, House of Assembly, Nova Scotia for the Fiscal Year 1991-92, Schedule T, pg. A10].

Since health institutions are evaluated quite comprehensively (at least every three years for accreditation purposes), the public is beginning to ask many questions regarding the administration, organization, and operation of school systems. Changes in politics, economics, technology and commitment to other service agencies have placed demands on school systems to examine the role of their educational institutions and the numerous

programs and curriculum "movements" that ebb and flow periodically. Because there is now a growing awareness that evaluation of such institutions is becoming an important task of government, school systems will require more frequent and analytical evaluations (Johnstone,1988). The development of sound evaluation techniques and methodologies cannot be deferred.

These concerns can be exemplified in Nova Scotia where, as mentioned above, education has assumed a lower priority than health in monies expended by the province. As a result, health has overtaken education as the biggest spender (Table 1.1) chiefly because of (1) its very labor intensified work force, (2) the exorbitant cost of equipment, and (3) the increased usage in health care by an estimated population of 906,100 (Statistics Canada, January 1992).

Although there has been a drastic decrease (20,000) in public school population in Nova Scotia over the past ten years, statistics indicate that during that same period, provincial contributions to the operating grants of school districts increased by 55.5 percent and the total municipal contribution to operating grants of the school boards increased by 60.6 per cent. During most of this same period (1982-1991), the number of teachers increased and supplementary funding was introduced (an average additional yearly contribution of 28 million). Again, operating expenditure grants increased yearly from 2.8 - 11.3 percent. As a result of these increases, the operating cost per pupil increased by 68.3 per cent. Therefore, the government of Nova Scotia is not paying less for education -- even with fewer students (Statistical Summary, Nova Scotia Department of Education, April 1991, Sections H-I, G - I, K-1,and L).

The Cost of Public School Education/A Nova Scotia Case Study

The estimated cost to operate public school education in Nova Scotia for the 1990-91 fiscal year was 723 million dollars (Table 1.2). Advanced education and job training costs totalled 91 million. With 11.8 million for capital outlays and 230.1 million in assistance grants to universities, the total expenditure was 1.053 billion.

The costs of public education in Nova Scotia, of which over seventy percent is made up of teachers' salaries, have more than doubled over the past decade. In 1980, the average operating cost per pupil was $2,106; in 1990, it was $4,217. In 1980, the average teacher salary was $21,681; in 1990, the average teacher salary was $47,799 -- an increase of 129 percent (N.S. Department of Education Statistical Summary, April 1991).

Table 1.2: Public School Education Budget 1991-92

School Board Grants	$572,167,600
Non-Formula	12,192,500
Debt Charges	52,300,523
APSEA	10,991,000
Book Bureau	6,922,900
N.S.Museum	2,817,400
Public Libraries	7,096,400
Teachers' Pension	36,198,000
Department Operations	22,357,577
Total Cost	**723,043,900**

[Source N S Department of Education, School Grants, October, 1991]

Are the benefits greater than the costs? For the 1990-91 school year, the government of Nova Scotia increased its provincial funding to twenty-one district school boards in order, as the Minister of Education, stated,

"to guarantee Nova Scotians the highest quality education system" (Giffin, 1990). But by what standards or criteria is the system of the "highest quality"? Certainly not by any empirical research or evaluation. Certainly not by an assessment or by accountability. Does the amount expended yield the highest quality? Aside from some spasmodic and standard audit checks and the yearly budgetary wranglings by some councils, the money is spent by each school district with little accountability and no formal evaluation!

A demand for periodic, comprehensive and objective evaluation of school systems in Nova Scotia, however, will mount as the public eventually calls into question "their public school systems' ability to operate a three-quarter billion dollar budget to deliver the highest quality education" (McCarthy,1988). The education delivery system is costly -- so costly, in fact, that it raises many questions concerning efficiency, effectiveness, economy and, equality.

The Cost of Evaluation/A Nova Scotia Case Study

Of the 723 million to be spent on public school education in Nova Scotia for the school year 1991 - 92, only 1.2 million (.16%) is allotted to the Research and Evaluation division of the Department of Education. The allotment is spent chiefly on the two major Nova Scotia Achievement Tests at the Grade 9 and Grade 12 levels, and for supplying management information services (data-based statistical information and summaries) pertaining to school district funding, student and teacher enrolments, and actual and projected budgets for the Department of Education and District School Boar

The Research and Evaluation Division responds to such needs. It does not initiate research. In contrast to the Alberta Education Department of

Research and Development which employs 40 people in the Evaluation branch alone, Nova Scotia employs one and one-half persons. In comparison, Maritime Telephone & Telegraph budgeted 1.4 million dollars (.56% of its 1992 estimated budget of 255 million) for research and development. Of the 13 million allotted to the Inspection Services (the division of the Department of Education responsible for school system evaluations in Nova Scotia), there is no separate budget or division for these evaluations.

School board and provincial educational budgets indicate the low priority assigned to school system evaluation. For example, in a recent school review in the Halifax County - Bedford Review Report (1992), an anti-evaluation attitude was demonstrated by the fact that over 20% of the questionnaires distributed to teachers were returned uncompleted because the teachers, claiming evaluation to be a threat to their profession, adamantly rejected any attempt to evaluate their schools or school system. Such a negative attitude is deeply embedded in the school structure "with the enthusiasm", as House (1978) once said, "of a chloroformed moth being pinned to a mounting board" (p. 128). The major reason given, however, by Educational Ministries or Departments of Education for not evaluating school systems is cost (Nicholson, 1989). For example, in Nova Scotia, the cost of a system evaluation is inversely proportional to the number of students in a system. Nova Scotia Department of Education evaluation costs (1989) were $6.00 per pupil (2,000 - 7,000 students), $5.25 per pupil (7,000 - 11,000 students) and $4.50 per pupil (11,000 - 30,000 students), or in dollars, from $12,000 to $135,000 for the employment of an external survey team (Lawson, 1990). It is actually a very minuscule part of the education budget -- in fact, from .0016 to .02 per cent!

The Pressure for Educational Accountability

Evaluation of school systems is a relatively new field. Wentling (1980) looks at the present state of the art of evaluation as being in the early stages of development. Pressures for some sort of educational accounting at the local district school level and the province have increased. The general consensus is that everyone involved in education "must work together to make the existing educational system efficient and effective in order to ensure that it takes advantage of the most creative and innovative practices available to better serve its students and, ultimately, the province's economy (Our Province, Our Future,Our Choice,1991.). This pressure for change has shifted from inside to outside organizations and constituencies to reform educational school systems and make them more accountable. What may have been voluntary improvement at one time is now becoming a mandatory requirement (Report of the Select Committee on Education, 1992).

The development of a school system evaluation process comes at a time when questions of accountability are being directed at district school boards and their staff. As a consequence, if they are to maintain public support, educators must maintain contact with public opinion and with methods to influence it. Too often, in the past, administrators were inclined to "fix" rather than to evaluate (Kilman, 1985). In fact, evaluation was judged a relatively minor concern and was therefore not very well articulated. As House (1986) stated "If evaluation [was] to be the watchdog of the public, it [was] a securely leashed watchdog" (p.6).

Despite the great strides that have been made over the past decades, Fullan (1989) espouses that research on the role of school districts in change is basically under- developed, and that change in individuals will

not result unless changes in the existing school systems occur. The need for this study can thus be justified on the grounds that there is a need for systematic assessments of school systems to provide advice and insight for change and growth, and to identify certain significant factors at the district school level that require initiating, altering, monitoring, improving, or terminating. School systems, to which millions of children are exposed annually, must be the prime object that warrants attention (Eisner, 1985).

It is the hope that this study may offer new insights into analyzing school system evaluations, applying theoretical concepts to the task of evaluation, and providing a practical methodology to assist school systems in developing and implementing evaluation. Such is the overall purpose of the thesis.

An Overview of the Thesis

Chapter II states the problem, explains the significance and purposes of the study, introduces the theoretical background, delineates the scope and limitations of the study, and provides an explanation of the procedures, processes, and outcomes of the methodology employed in the study.

Chapter III begins with an analysis of the historical perspectives of evaluation and describes the present state of the art in Canada and the United States. Through a review of the literature relative to evaluation, explanations of different definitions of evaluation are also given.

Chapter IV describes the purposes, strengths, weaknesses, contributions, applications and classifications of the evaluation models of five leading theorists and presents the results of the review of the literature ofeducational evaluation theories and models.

Chapter V delineates the various theoretical and practical definitions, classifications, components, and comparisons of school systems and provides the data from the search of literature relative to school systems.

Chapter VI provides a review and analysis of organizational and school effectiveness literature, concluding with the results of the data.

Chapter VII presents a new approach towards school system evaluation, the **LINC *interactive* Model** -- a framework composed of thirteen key school system components, tabulated and ranked from the data resulting from a review of educational evaluation, organizational effectiveness, school systems, and effective schools literature. The chapter also compares and contrasts the components of the **LINC *interactive* Model** with each of the models of the five leading theorists, and concludes by presenting a specific rationale that underlies this new approach to the evaluation of school systems.

Chapter VIII details the four domains of the **LINC *interactive* Model**: the three "**L**" components, the two "**I**" components, the four "**N**" components, and the four "**C**" domains by using a framework that presents the definition, significance, classifications, and pertinent characteristics of each of the thirteen components to indicate how they may be applied to the evaluation of school systems.

Chapter IX describes fully the background and processes of the twenty-six school system surveys/reviews conducted in the province of Nova Scotia (1979-1991). As a test, the **LINC *interactive* Model** is applied to three of the more recent Nova Scotia school system reviews.

Chapter X summarizes the study, presents conclusions, and offers suggestions for current and future applications.

CHAPTER II

The Problem, the Purposes, and the Methodology

2.1

Significance and Purpose of the Study

Introduction

The general consensus from educational evaluation literature is that there appears to be a lack of adequate evaluation theory of school systems (Anderson et al., 1975; Hamilton et al., 1975; Patton, 1981; Scriven, 1983; Stufflebeam & Welch, 1986; Guba, 1986 and Wolf, 1989). This problem is compounded by the fact that most writers have concluded that the evaluation approaches that do exist seem to be less than satisfactory for the evaluation of school systems. This chapter states the problem, explains the purposes and significance of the study, introduces the theoretical background and methodology, delineates limitations of the study, and concludes by providing an explanation of the procedures employed in the study.

The Paucity of School Systems Evaluation Models

Twenty years ago in their preface to Encyclopedia of Educational Evaluation, Anderson, Ball & Murphy (1975) wrote "almost everything there is to say about the evaluation of education has already been said -- or written elsewhere" (p. VIII). While such a statement may still be true of evaluation of students, personnel and curriculum, in that many models have continued to be conceptualized for these purposes over the past decade, a paucity of approaches seem to exist relative to the evaluation of school systems. In a table of data sources for evaluation (Anderson et al., 1975) that enumerate a

list of objects recommended for assessment, none specify the evaluation of school systems. Evidently, it is easier to delineate individual and curriculum evaluation (Johnstone,1978). Surveys and reviews connected with school systems evaluation abound. The problem is that they comprise a compendium of individual components of school districts rather than a unified appraisal of a school system as a unique social organization. In other words, the different components of school systems have been looked at in isolation rather than in the context of their interrelationships. School systems encompass a much broader area -- **the environment, the individual and the organization** -- and their relative interactions and effects on the overall provision of both formal and informal education within a school district.

Anderson et al. (1975) also denoted the lack of adequate theory and of significant criteria for assessment. Hamilton et al. (1975) advocated the need for more relevant data and illuminative evaluation reports that would illustrate the features, problems, and issues in the particular object being evaluated. Stufflebeam and Webster (1985) pointed to the lack of trained personnel. Of the one hundred models conceptualized from 1965-80, Patton (1981) concluded that all of them were basically a result of Title I projects spawned by the Elementary and Secondary Act (U.S.) of 1965 that mandated that each compensatory program be assessed to justify expenditures.

Nine years ago, Scriven (1983) noted that there were fifty evaluation models, two major evaluation organizations, several sets of standards and a number of evaluation journals. Since the enactment of the Elementary and Secondary Education Act in the United States over twenty-five years ago, the number of educational evaluation models has grown exponentially. Yet with such a development, there still exists a wide

range of theoretical and methodological problems. From his survey of numerous models, Guba (1986) concluded that evaluations were usually lacking in clear definitions, adequate theory, explicit criteria, knowledge about decision processes, and the varied approaches for different levels of schooling. Most critics agree with Guba that evaluation models lack an appreciation of system components and an ability to report information clearly and concisely.

Stufflebeam and Welch (1986) reviewed one hundred and fifty articles that dealt with program evaluation studies at the school district (i.e., school system) level. These articles were garnered from Education Evaluation and Policy Making (all issues), Studies in Education Evaluation (all issues), and Review of Educational Research (1971 - 1986), as well as Educational Resources Information Center (ERIC) holdings, personal files, and discussions with colleagues. Questions posed dealt with purpose, methodology, clients, funding, utilization, objects of evaluation, and the qualifications of an evaluator. Of the 150 articles studied, only 34 presented any results of empirical research. Finding so few such studies, the researchers revised their initial objectives and analyzed all the articles to discover their general content. Ninety of the articles (60%) were actually "how to do" handbooks developed for evaluation of programs at the local level. The next major group (approximately 20%), dealt with providing information for school personnel faced with evaluation demands, chiefly compensatory projects; in fact, 90% dealt with Title I projects. A few articles emphasized effectiveness; others ranged from evaluation techniques to evaluation problems. None was on school systems, per se. The major topic of the evaluations was program at the school district level, not evaluation of the school district/system.

The Dissatisfaction & Problem with Traditional Evaluation Models

As already indicated, there is a substantial body of knowledge and a number of theoretical appraisals or models available for evaluating the individual or the program, but not the school system. A number of authors (Baldridge & Deal, 1983; Burnham, 1973; Popper et al,1978; Parsons, 1960; and Tracy, 1987) agree that the surveys and reviews of school systems or districts that do exist usually comprise an appraisal of singular components -- curriculum, maintenance, administration, transportation, etc., and that most of the educational evaluation surveys and practices focus on such individual topics to the neglect of the school system as a whole. Furthermore, they conclude that what is written about school systems often pertains chiefly to a system analysis from a business or economic organizational perspective.

The school system is defined as **a complex and dynamic social organism of interrelated components, highly specialized and differentiated, functioning together for common goals** [Cohen & Garet (1975); Kilman (1985)]. The failure to address this definition of a school system has limited the value of most evaluation theories currently in use. Traditional evaluations of school systems have overlooked the key question that should be posed ... a question that embodies a major characteristic of the concept of a school system; viz, **is the school system, as a fundamental social organization, operating effectively as a collective entity of all of its interdependent and interactive sub-units?** (Hoy and Miskel, 1991).

Assumptions

Yet it may be that the models of theorists just haven't been tried or, if tried,

were found lacking ... or it may be that their approaches are not familiar, comprehensive or understood enough to be applied to evaluating school systems. Moreover, it may be that their models are inappropriate and lack congruence because of the nature and complexities of components of the school system as compared to the nature or singleness of components of the evaluation model. The very nature and the complexities of school systems and the inability of current models to match or link with school system components may give rise to the need for a more unique approach to school systems evaluation.

Consequently, to achieve one's objective of conceptualizing a framework for school system evaluation, a useful approach might be (1) to extrapolate the characteristics and components of effective school systems from the myriad of information relative to educational evaluation, systems evaluation, organizational effectiveness, and effective school literature, and (2) to z.look at the school system as a social system in order to delineate the components that comprise a school system.

Whereas many evaluations have been useful in assessing isolated and specific components of public school systems (conveyance, finance, facilities, curriculum, personnel) or have emphasized a particular part of an evaluation process [inputs (resources) or outputs (goals)], little, if any, holistic system wide evaluation appears to have been done -- more especially regarding the <u>interactive</u> characteristic of system components.

Aside from the presumed lack of adequate evaluation theories and practices for school system evaluation, perhaps the dissatisfaction with school system evaluation lies in the realization that current evaluation practices and theories, although laudable for their basic principles and/or

concepts of evaluation, are derived from evaluation theory that focuses on programs and, consequently, do not relate to the complexities of a school system.

House (1973) denotes that "the usual temptation is to concentrate on too narrow a range of issues" (p. 8). This study assumes the need for a new model towards school system evaluation that will emphasize the assessment of the major interrelated and interactive components of a school system. Existing models were designed to look at different things than school systems. Most theoretical approaches appear to be concerned with a specific methodology of a theoretical construct rather than in a functional paradigm that constitutes an assessment of identifiable variables. Current evaluation practices in the United States, Canada, and Nova Scotia, in particular, seem to substantiate these assumptions.

Purposes of the Study

The overall purpose of the study is to formulate, from a review of the pertinent literature, an evaluation framework that incorporates the best dimensions and components unique to school systems, thus providing more effective criteria and indicators for evaluating school districts.

The sub-purposes of this study are:

(a) to examine what is meant by evaluation,

(b) to analyze evaluation models of leading evaluation theorists in order to ascertain whether their approaches are suitable for the evaluation of school systems,

(c) to delineate the components and characteristics that comprise school systems,

(d) to devise an approach/model that will adequately address school systems evaluation,

(e) to compare the school system components derived in (c) and (d) with the theoretical approaches analyzed in (b), and

(f) to analyze selected Nova Scotia evaluations with the new approach to school systems evaluation.

Limitations of the Study

The focus of this study is on **what** to evaluate; that is, in identifying the key components for school systems evaluation. The study is, therefore, restricted to a collection of pertinent school system variables and manifesting how they interact with each other. Even though suggestions are made throughout the study regarding evaluation instruments, processes, and guidelines to be used by an evaluator, the study does not detail the "how-to" of evaluation; i.e., methods or strategies to be employed when evaluating a school system. The study is confined to constructing a functional approach that enumerates a specific compendium of key identifiable variables to be assessed.

In regard to the evaluation models conceptualized by leading theorists, the study is limited to the explication of five theorists and their models for purposes of comparison with and contributions to a new model for school system evaluation. It is also important to note that the study pertains to the evaluation of school systems. It does not deal singularly with the evaluation of teachers, individual schools, curricula, students, or programs. The study concentrates on the evaluation of school systems as open social organizations and the pertinent components that comprise it.

Delimitations

The study is limited to model building -- specifically to the construction of a functionalist paradigm in contrast to a theoretical approach for the evaluation of school systems. While twenty-six school district reviews conducted in Nova Scotia from 1979-1991 are alluded to in the study, only three of these surveys, for reasons stipulated later, will be used to test the new functional model

2.2

The Methodology for the Study

Introduction

To accomplish the major purpose and sub-purposes as stated in the previous section (2.1), the major **methodology** to parallel each purpose consists of:

(a) a review of educational evaluation literature,

(b) a review of the models of prominent evaluation theorists and a comparison of their theoretical persuasions with the components of thenew model, and

(c) a review of the literature pertaining to educational evaluation, school systems, organizational effectiveness, effective schools, and to public school system documents and surveys ,

(d) devising, from an analysis of the data from the literature review, a more relevant approach that will adequately address the needs of school systems evaluation,

(e) comparing the new approach to other evaluation models, and

(f) testing the model against selected Nova Scotia school reviews.

Each of the purposes and the methodological approaches to accomplish these purposes will be described in detail in the chapters that follow.

How the Overall Literature Review pertaining to Educational Evaluation and School Systems Was Completed

The review of literature for this study was enhanced firstly by the use of ERIC

CD ROM (Compact Disc Read Only Memory) Technology. Since the specific study dealt with the **Evaluation of School Systems** and had, among its stated purposes, to examine what was meant by evaluation and by a school system (its characteristics and components) and to analyze existing evaluation models for adequacy and/or unsuitability for school systems evaluation, a review of the literature was undertaken in the following areas: (a) evaluation, evaluation models, and evaluation theories, (b) school systems (theories, characteristics and components), (c) organizational effectiveness, and (d) school effectiveness. Major ERIC descriptors used were **EVALUATION, SCHOOLS and ORGANIZATIONS**. The search was narrowed in the following ways.

Literature Review of Educational Evaluation Literature

The descriptor EVALUATION rendered innumerable sources from educational journals and documents. The subject matter and quantity of material was limited to evaluation models and theories and to educational evaluation by using the specific descriptors: EVALUATION METHODS, EVALUATION RESEARCH, EVALUATION ASSESSMENT, PROGRAM EVALUATION, EVALUATORS, EVALUATION PROBLEMS, EVALUATION HISTORY, EVALUATION CRITERIA and EVALUATION MODELS. To a lesser degree of importance were such descriptors as EVALUATION UTILIZATION, INSTITUTIONAL EVALUATION, CASE STUDIES, ACCOUNTABILITY, and ACCREDITATION.

While the general descriptor, ELEMENTARY SECONDARY EDUCATION, produced a vast quantity of available resources, again the major retrieval sources were obtained by narrowing the general subject heading to

the specific descriptors: EDUCATIONAL RESEARCH, EDUCATIONAL ASSESSMENT, EDUCATIONAL IMPROVEMENT, EDUCATIONAL CHANGE, EDUCATION POLICY, EDUCATIONAL PLANNING, EDUCATIONAL OBJECTIVES, EDUCATIONAL ENVIRONMENT or PROGRAM EVALUATION, PROGRAM IMPROVEMENT, PROGRAM DEVELOPMENT AND PROGRAM EFFECTIVENESS.

Literature Review of Evaluation Models and Theories

Narrowing the subject matter at all times to literature specifically relevant to **Educational Evaluation** and/or **School and Organizational Systems** helped to delineate the appropriateness of selections. Particularly helpful was the utilization of ERIC IDENTIFIERS -- applications which retrieved specific information regarding the evaluation model of any theorist and its applications. The research of evaluation theorists and models was limited to a study of five theorists and their models: Daniel Stufflebeam (**C.I.P.P. model: Context, Input, Process, Product**), Malcolm Provus (**DEM: Discrepancy Evaluation Model**), Robert Stake (**Countenance/Responsive model**), Michael Scriven (**Goal Free Evaluation Model**), and Elliot Eisner (**Educational Connoisseurship and Criticism**).

Each of these theorists and his respective model was chosen on the basis of their continued prominence and permanence in the review of the literature of educational evaluation theory and practice. Explanation will be given in this study to the features, classifications, advantages and disadvantages of these prominent evaluation models as conceptualized by these leading theorists. Aside from their permanence and prominence in the review of literature of educational evaluation, their selection is also

substantiated by the widespread use of their models and/or the adaptation of them in empirical studies and research. Again, the status in which they are held by their peers and educational organizations, as exemplified by the many evaluators/disciples who have emulated their approaches both in theory and practice, gives authenticity to their selection. Moreover, the models of each of the five theorists are representative of the major classifications into which educational evaluation can be placed; that is, each theorist, as fully explained in the Chapter IV, posits an approach that applies to one specific definition, purpose, and classification of evaluation. Each model, therefore, represents one major evaluation principle: goal assessment, decision making, judgement, responsiveness, or improvement.

The desired information regarding these theorists and their models was procured by entering into the computer either the name of the theorist or his/her specific model [e.g., either Stufflebeam or Context/ Input/ Process/ Product Model (not CIPP)]. Materials relative to Elliot Eisner, for example, were retrieved either by entering the individual's name or by using such descriptors as AESTHETIC EDUCATION, ART EDUCATION, ART APPRECIATION, EDUCATIONAL CONNOISSEURSHIP or EDUCATIONAL CRITICISM. Usually, the name of person(s) (e.g. stakeholders, Scriven, Stake, Provus, etc.), the name of a place (country, province, state or actual school district), or a thing (surveys, general system theory, etc.) was sufficient to obtain the information desired.

Literature Review of School Systems

From the ERIC CIJE and RIE file, for 1966-1979 and 1980-1991, and by using the descriptors **SCHOOL DISTRICTS or COUNTY SCHOOL**

DISTRICTS or BOARDS OF EDUCATION, the computer indicated the availability of records with those ERIC subject headings. However, by limiting the above descriptors or subject headings to those with a word/phrase or index/descriptor such as **CANADA, CANADA (Alberta) and CANADA (Atlantic Provinces)**, there were fewer records remaining for perusal and possible selection.

The descriptors, **SCHOOL DISTRICTS or SCHOOLS or ORGANIZATIONS**, rendered information re school or organizational size, changes, objectives, climate, theories, reorganization and effectiveness, as well as access to **SYSTEMS** analyses, approaches, concepts, and development.

Literature Review of Organizational/School Effectiveness Studies

Descriptors such as INSTITUTIONAL (research, characteristics, improvement, leadership, etc.), ORGANIZATIONAL (objectives, effectiveness, change, communication, etc.), SCHOOL EFFECTIVENESS (herein lies an example of specificity and the importance of the ERIC thesaurus, as ERIC does not respond to "Effective Schools"), and SCHOOL (administration, public, structure, districts, personnel, surveys, improvement) had to be narrowed to the specific indicators as manifested in the parentheses. Other subject topics as policy, decision making, management, performance, leadership, staff, environment, etc., usually appeared as a result of the utilization of the above indicators.

Literature Review of Other Evaluation Sources: Although the ERIC files were used extensively, other indexes such as the Canadian Educational

Index, Current Index to Journal in Education, and the Educational Index were reviewed in order to encompass every index file that included any specific of combined material relative to the topics of educational evaluation and school systems.

Access to books, documents and other materials was partly facilitated by NOVANET, a simple and easy computerized library system of seven Nova Scotia universities that provides traditional points of access to authors (AUT), titles (TIT), and subjects (SUB). Although those first three entries, (AUT, TIT and SUB) were helpful in a literature search, the BOOLEAN searching capability (entry No. 5 of NOVANET) provided access to all three indexes at the same time. This was particularly helpful as a limiting function. For example, the insertion of the word **EVALUATION** rendered a total of 5,424 entries and **SCHOOLS/SYSTEMS**, 25,089 entries. By limiting, however, one's search to **School Systems Evaluation**, the search was narrowed to only eight distinctive selections.

Aside from entering such descriptors as Organizational Effectiveness or School Effectiveness into the Novanet Online Catalogue, or from using the regular library card catalogue, success in obtaining salient and relevant materials most often developed from bibliographies of texts obtained from selected books of private libraries. These texts belonged to university professors, school system administrators,and members of Provincial Departments and Ministries of Education. Each of these individuals has been either directly involved in the teaching of evaluation theory or has been engaged in the study and /or practice of school system evaluation. In all cases, the libraries of each person were available to the writer for his perusal and for the selection of salient information pertaining to this study.

Bibliographies from these texts that related to evaluation of school systems proved invaluable as a means of locating the author or title of excellent resource material.

Although these selections formed the major sources of the literature review, other articles, documents and texts of the past fifty years that had significant bearing on the two topics of evaluation and school systems were utilized in the study.

2.3

How the Data were Analyzed and Compiled

During the first analysis of the literature sources, a record was kept (alphabetically by author) of all the pertinent data that dealt with the two topics; viz, educational evaluation and school systems, This tabulation was done for each of the four types of the literature reviewed, namely:

(1) educational evaluation literature/models,

(2) organizational effectiveness literature/studies,

(3) school systems literature/studies, and

(4) effective schools literature/studies.

Educational Evaluation

The first topic/purpose, a review of the educational evaluation literature and models, was further analyzed to ascertain the meaning of the term evaluation. From this analysis developed a short and concise historical perspective of evaluation, the current status, standards, and practices of evaluation in the United States and Canada, and, from a synthesis of educational evaluation literature and major theorists and their models, an interpretation of the

definitions, meanings and purposes of evaluation (as explicated in Chapter 3, pg. 37).

A Review of Leading Theorists

The classifications, descriptions, applications, strengths, and weaknesses of the evaluation models conceptualized by five leading theorists were evaluated with the emphasis being on their applicability as approaches to evaluating school systems. The study also analyzed principles contained in the approaches of major theorists that could be used in a new evaluation model. From a review of the literature pertaining to educational evaluation models, the study also judged the models fit to the evaluation of school systems and, as a result, whether or not a new approach was needed. While the focus was on the evaluation of major models (for reasons already mentioned), other models, less significant because they were only mentioned sporadically, were also examined to ascertain their contribution and possible adaptability to school system evaluations.

Selecting School System Components

To explain the meaning of a school system, analyses were conducted of each literary document of the above four types of the literature review (viz. educational evaluation literature/models, organizational effectiveness literature/studies, school systems literature/ studies, and effective schools literature/studies) to ascertain the specific components that constitute school systems. These components provided the framework necessary for a comparison with theoretical evaluation models that would be selected for analysis as well as a possible framework for a more workable evaluation

model for school systems evaluation. The selection of these key school system components was based upon three criteria:

(1) their **frequency** of appearance in the 1970's and 1980's. The 1950's and 1960's were included originally but later discarded because the quantity of material available was insufficient. The frequency of a component (e.g. goals) was judged by its recurrence; that is, by its repetition in the four categories of literature reviewed. The frequency was noted for each decade.

(2) their **prominence** in the literature research, that is, how significantly those components were determined as leading, conspicuous and important criteria for school systems evaluation. A Likert type-scale, as explained below, was used to determine the prominence.

(3) their **permanence** throughout the past two decades as determined by their continued existence in education evaluation and school system literature. This was a product of their constant frequency and prominence; consequently, the permanence would be judged by the total tabulations of the frequency and prominence of each component.

Components that met these criteria would constitute a descriptive compendium of components to be used in a school system evaluation, against which evaluation theoretical models would be judged to ascertain their suitability for evaluation of school systems. Such a comparison would indicate whether or not a new approach was necessary. If the comparison indicated a lack of fit or mismatch, then these "missing" factors would help form the framework for a new approach. As important indicators of school systems evaluation appeared in the review of the literature, each component, anticipated or unanticipated, was listed by author, and dated and ranked according to a Likert-type scale of:

0 - NO MENTION

1 - NOT IMPORTANT

2 - SOMEWHAT IMPORTANT

3 - IMPORTANT

4 - VERY IMPORTANT

The judgment of a ranking (each component/characteristic from 0-4) was made according to the degree in which a component was predominant in a particular piece of literature. If at least two-thirds to three-quarters of a selected article dealt with a specific component, it was deemed VERY IMPORTANT. If one half to two-thirds of the article highlighted a particular component, then that component was deemed IMPORTANT. If one-quarter to one-half of the article dealt with a component, it was classified as SOMEWHAT IMPORTANT. If there was very little mention of the component, it was NOT IMPORTANT.

Only the top two rankings of the scale were used (3=IMPORTANT and 4=VERY IMPORTANT) because of the significance of including only those components that, because of their frequency of occurrence and their permanence in the 70's and 80's, ranked as being prominent (that is, as being most important). Each time a component appeared (frequency and prominence) in an article from the 70's and 80's as important or very important, it was tabulated, These prominent and permanent components were used as standards against which existing evaluation models were compared. For example, the "identified" components from the literature review were compared with the various approaches of the five leading theorists to ascertain whether or not their models dealt with these specific school system components.

Additional Public School System Components

By examining Nova Scotia school system reviews (1979-1991), the actual schema (organizational) charts, by-laws, guidelines and the regulations of Nova Scotia public school systems, as well as the Education Acts and Regulations of provincial Departments or Ministries of Education (more particularly the Education Act, The School Board Act, and the Regulations pursuant to the Education Act for the Province of Nova Scotia), and from personal involvement in administration, research, and evaluation of Nova Scotia school systems, a further identification of important components of public school systems was completed by again ascertaining their frequency, prominence, and permanence in these documents, and in school system surveys.

Nova Scotia Case Studies

In addition, the actual evaluations of twenty-eight school system reviews/surveys performed in Nova Scotia by the Nova Scotia Department of Education from 1979 to 1991 served as a comparative base against which the new model was tested. The analysis included a tabulation and comparison of the data of all the components assessed in each school system evaluation in order to ascertain which school system components were considered important by the evaluators. The importance of each component was delineated by (1) comparing the amount of concentrated reporting and data assigned to each component in the final evaluation report, (2) comparing the number and type of recommendations that accompanied the data on each of the components evaluated, and (3) ascertaining the resulting utility by school boards of the recommendations contained in each of the twenty-eight school

reviews. Through this procedure, it was possible to obtain the major emphases placed upon the evaluations by the evaluators and to enunciate the specific components of a school system from the perspective of these reviews. As a result, it was also possible to deem how practice matched with theory, by comparing the important components of public school system surveys with those that comprised the new model for school system evaluations. The analysis of three of the twenty-six system "reviews" conducted in twenty-six school districts in Nova Scotia between 1978-1991, namely the Northside-Victoria School District Review (1985), the Dartmouth School District Review (1988),and the Halifax County - Bedford School District Review (1991) were used to test the new approach for evaluating school systems. These three specific reviews were chosen because they were the three evaluations in which the writer was involved. As a former Superintendent of Schools for the Northside-Victoria District School Board (one of the twenty-two provincial public school districts in the Province of Nova Scotia), I participated in its 1985 system review. In addition, I was a consultant following the Dartmouth District School Board Review of 1988 and one of the two external members of the 1991 review team that completed an evaluation of the Halifax County-Bedford District School System.

Summary

The chapter has outlined the methodology of the study. Each procedure undertaken in the study parallels each purpose. This chapter has delineated how the literature review was completed for each of these purposes. For example, the first purpose stated was to examine what was meant by evaluation; hence, the first aspect of the methodology was to review the

literature pertaining to evaluation. Likewise, the second purpose of the study was to enumerate the components of a school system, while the third was to analyze evaluation models. Each aspect of the literature review accomplished these purposes by examining the literature relative to evaluation, school systems, evaluation models, and organizational and school effectiveness.

The chapter also explained how, through the use of a Likert scale, the data from the literature review (the frequency, prominence, and permanence of each school system component) were tabulated in order to determine their importance as school system components. These components provided the framework to construct a new model by which a comparison with theoretical evaluation models and a test of existing school system evaluations in Nova Scotia were made.

In adhering to the stated purposes and their subsequent methodologies, Chapter III examines, through a review of literature relative to evaluation and school systems theory, the first purpose of this study; namely, what is meant by evaluation.

CHAPTER III

REVIEW AND ANALYSIS OF EDUCATIONAL EVALUATION LITERATURE

Introduction

This chapter examines what is meant by evaluation (the first purpose of this study) by providing an analysis of the literature review pertaining to educational evaluation. To accomplish this purpose, there is initially presented an historical perspective relating to the development of educational evaluation approaches, designs, and procedures, followed by an examination of the development of educational evaluation standards. The chapter fully delineates the major and divergent definitions of educational evaluation in order to render an interpretation and understanding of what is meant by evaluation. The chapter concludes with a view of current evaluation practices in the United States and in each province and territory of Canada.

3.1

Evaluation: An Historical Perspective

1800-1900

Although evaluation may be traced as early as 2000 B.C. when the Chinese conducted civil service examinations or when Socrates evaluated questioning, the general consensus among historians is that evaluation of schools and various components of school systems began during the last century. Such famous nineteenth century educators as Horace Mann (performance testing) and Joseph Rue (subject assessment) were the initial leaders of the progressive movement that transferred evaluation from enlightened philosophy to reformed research (Cronbach et al.,1981). In Great

Britain during the period 1800 to 1900, annual evaluations and yearly reports regarding conditions of schools and student achievement were regularly submitted by school inspectors (Kellaghan and Madaus,1982). School accountability in nineteenth century Britain was expressed, for a time, in a 'payment by results' system; in other words, money was paid to teachers only if the students reached a required academic standard (Broadfoot, 1979).

1900-1930

Evaluation in America had its roots in Robert Thorndike, an early advocate of educational testing and the school accreditation movement. Early evaluations were product-oriented, based on achievement data in contrast to present day evaluations which are usually process-oriented, requiring varied tools to gather data for specific purposes (Lotto, 1982).

In North America, the first three decades of this century were characterized by scientific management and standardization tests as measurements of the efficiency of school systems and schools (Austin and Garber, 1982). This period marked the beginning of the age of progressive education. Responsible for an immediate change in the direction of evaluation, the progressive movement stressed a child centered approach to education rather than the practice of testing limited academic objectives or highly structured curricula.

1930-1945

The period between 1930-1945 is referred to as the Tylerian Age. Saluted by theorists as the father of educational evaluation, Ralph Tyler develeloped an innovative and alternative approach to evaluation that resulted in clearly

defined behavioral objectives and the development of measuring instruments to assess a wide range of outcomes (Westbury, 1972). Tyler actually coined the phrase "educational evaluation" (conceptualized in a series of articles in the Ohio State University's Educational Research Bulletin and defined it to mean the assessment of the extent to which valued judgements had been achieved as part of the instructional program (Madaus et al, 1982). The seminal Eight Year Study report of Smith and Tyler (1942), a pioneer study of thirty schools that developed their own curriculum to meet their needs, became the genesis of modern educational evaluation. The document allowed Tyler to publicize his evaluation approach which set the stage for at least the next twenty-five years.

1945-1965

The years following World War II were characterized by the "baby boom" that necessitated the building of new schools, securing more teachers, and consolidating resources. School Systems were not geared to evaluation for improvement and accountability. Although there was a definite interest in developing new tests, strategies, taxonomies, designs and procedures, educational evaluations were viewed as optional by local school districts (Stufflebeam and Shenfield, 1985). Often called the Age of Innocence (1946-56), the decade was characterized by management by objectives. This meant assessing the congruence between individual and/or institutional performance and goals in behavior terms of decisions and procedures. Hoy and Miskel (1987) refer to this approach as " the process by which administrators and teachers jointly define their common goals in terms of expected outcomes" (p. 204).

By the late 1950's, Sputnik was launched. Instantly, education was assumed to be of extreme importance! The reaction to a sagging school system was immediate. As a result of the Elementary and Secondary Education Act (ESEA) of 1965, one billion dollars was released annually in the United States to develop and provide new curriculum programs (especially in mathematics and science), to meet special education needs of disadvantaged students and to upgrade the educational system. Senator Robert Kennedy proposed an amendment requiring the annual systematic evaluation of programs funded under legislation (Wolf, 1987). If the U. S. government was going to spend huge sums of money to enhance and uplift the educational system, then it must be made aware of the effects produced. The ESEA was the first major piece of social legislation to mandate project reporting; that is, to mandate evaluation as a means of political accountability. Educators discovered that they could no longer escape evaluation. The Tylerian approach of defining objectives and assessing outcomes was transformed into a myriad of standardized testing, judgement of proposals and field experiments. There was a definite shift from comparisons of norm-referenced tests of control groups to reconceptualized evaluations that would guide, inform, and analyze test score items rather than mechanically reporting them.

1965-1980

By 1965, the United States undertook a two-fold approach to education: equality and accountability. With annual systematic evaluation of funded programs required, evaluation became politically popular. Tyler's two-fold approach (standardized test scores and assessment of the congruency

between outcomes and objectives) became the state of the art in educational evaluation. John Coleman's famous study, Equality of Educational Opportunity (1966), received considerable attention, especially his startling conclusion that schools bring little influence to bear on a child's achievement that is independent of his/her background and general social context. Evaluation concern, as Madaus et al. (1982) reported, had shifted "from the realm of theory and supposition into the realm of practice and implementation" (p. 13). Egon Guba (1969) was prompted to say, "there have been for all practical purposes, no advances in the theory of evaluation since Ralph Tyler completed his formulations during the decade in the forties" (p.38). Tyler himself (1967) preached for new innovations and accountability.

But school systems had been caught unprepared; bureaus of evaluation and decentralized school government had been too hastily formed. Staffs were ill- trained and a dearth of information to guide educational practitioners prevailed. As a result, in the late 1960's and early 1970's, there were hectic and questionable developments in evaluation. Phi Delta Kappa, an international organization of educators, established a National Study Committee in Evaluation (Stufflebeam et al, 1971) to acknowledge the malady of educational evaluation and to stimulate the development of new theories and methods. Fearing the loss of the golden egg of funding and encouraged by local district school boards who couldn't afford such a loss, evaluators developed new methodologies, approaches and techniques -- commonly labeled "models".

While their quality was at times suspect and their structure often "ad hoc", new conceptualizations of worth did arise. While Tyler (1967)and Popham (1974) stressed criterion-reference tests, Hammond

(1967); Eisner(1967) and Provus (1971) reformed the Tylerian model by introducing an intermediary step. Rather than defining an objective and then measuring its outcome, Provus, after defining the standards, determined whether a discrepancy existed in the objective and used that discrepancy information to change the objective or standard. The purpose of evaluation now became not simply defining and assessing an objective but ascertaining and interpreting its process (Eisner,1977). As Glasser (1979) stated, "the process should produce the product plus information about how to improve it" (p. 80). Metfessel and Michael (1967) extended the approach of measuring outcomes to improving educational decisions. They designed an eight step paradigm stressing decisions that involved the whole school community as participants or facilitators of the evaluation.

Much of the vibrancy of some new system evaluation approaches paralleled the fields of discipline from which the "innovators" came. For example, if the theorist's background was economics, a cost analysis approach developed, if administrative, management and if the pseudo evaluator was laboratory or psychologically oriented, the model was a "true" experimental one (Wolf, 1987b). Such system analytical (product-driven) approaches of various industrial, corporate and business writers were gradually challenged by the methods and conceptualizations of Stufflebeam, Scriven and Stake -- all three, incidentally, in the year 1967. These three theoreticians examined information for decision making or judgement of merit and worth as alternate approaches to evaluation. As a result, the period of the late sixties and early seventies produced a great deal of ferment and confusion. The diversity of views and approaches, however, did offer insights into important questions surrounding comprehensive educational evaluation --

mainly the realization that a variety of approaches and professionalism were admissible in the conduct of evaluation studies.

3.2

Evaluation Defined

As Defined in Evaluation Literature

Before advancing a definition of evaluation for this study, it is important to consider the various notions of evaluation that have comprised those definitions opined by evaluation theorists. Educational evaluation tends to be defined by researchers in direct relation to the specific role perceived for evaluation or the results anticipated from it. In other words, the way in which one defines evaluation has a direct impact on the process that is followed.

Generally, educational evaluation has been defined in four ways: (i) **"determining to what extent educational objectives have been met"**, (Tyler, 1950, p. 69).

Tyler (in Berk, 1981) proposed one of the first definitions when he specified evaluation as **"the process of determining whether the objectives of a program have been achieved"** (p.4). This definition of evaluation, denoting a process of determining whether objectives of programs had been achieved through a congruence/comparison between performance and specified objectives, has been reiterated during the past decade by many evaluation theorists. For example, Wenting (1980) denoted that evaluation was often used as a synonym for accreditation, testing, assessment, and judgement, but stressed that it was "the comparison of performance to specified objectives" (p. 17). Aside from the effort to understand the functioning and effects of programs, Meyers (1981) also distinguished

evaluation as a "planned sequence of activities to achieve some goal". The National Study of School Evaluation in the United States (1979) agreed with Tyler's rationale that evaluation is based on the principle that a school or a program should be judged in terms of what it is striving to achieve (its philosophy and objectives) and according to the extent that it meets the prescribed needs of its students and its community.

(ii) "the determination of merit and worth" (Scriven, 1981, p. 14).

In contrast to Tyler's planned sequence of activities to achieve goals, Scriven (1967), a consumer-oriented evaluator, tersely defined evaluation as **the determination of merit and worth.** This definition is similar to one in the Random House College Dictionary (Revised Edition, 1988) in that the root of the word evaluate suggests the function of evaluation as placing a value, merit or worth upon the object being appraised. Scriven and Stake are the leading evaluation practitioners and theoreticians who advocate this definition of evaluation. Beeby (in Wolf, 1984) described evaluation as "the systematic collection and interpretation of evidence, leading, as part of the process, to a judgement of value with a view to action" (p. 2). Many other theoreticians have translated this definition in the same way. Popham (1975); Straugham and Wrigley (1980); Guba and Lincoln (1982); House (1986b) and Common (1987) all subscribe to the connotation of evaluation as a determination of value, merit or worth. Evaluation, in their estimation, is primarily an act of judgement -- a complex mental act of deciding the worth of something. The supposed similarities, however, become clouded when one examines other theorists and the contexts in which they denote evaluation. For example, Wentling (1980) and Dressel (1976) both

acknowledged evaluation as a determination or judgement of worth. The former, however, also defined evaluation as the determination of the extent to which goals had been achieved (Tyler's hypothesis) while the latter defined evaluation as also being a collection and interpretation of relevant material to serve as a basis for rational judgement in decision making ... which leads to a third definition of evaluation!

(iii) "providing information for decision-making in choosing alternatives" (Stufflebeam et al, 1971)

Stufflebeam (1974); Eisner (1976); House (1986a) and the U. S. Joint Committee on Evaluation (1981) equally compound the problem. While they agree that evaluation is an assessment of merit and worth -- a judgement made upon what has been measured, they also acknowledge the anxiety such a determination creates among those evaluating and those being evaluated. Alkin (1969) and Stufflebeam (1970) had stressed that evaluation was the process of ascertaining the areas of concern, selecting appropriate information and collecting and analyzing information in order to provide alternative solutions for decision makers. As a result, Stufflebeam et al (1971), in the Phi Delta Kappa Commission on Evaluation, posited a third definition of evaluation; namely, **"the process of delineating, collecting and providing information useful for judging decision alternatives"** (p.38). Providing information for decision making is now a widely accepted reason for evaluation studies (Leithwood, Wilson and Marshall, 1981).

The disciples of Stufflebeam and Alkin are numerous. For example, Patton's (1982) definition enlarges upon Stufflebeam's and Alkin's:"The practice of evaluation involves the systematic collection of

information about the activities, characteristics and outcomes of programs, personnel, and products for use by specific people who reduce uncertainties, improve effectiveness, and make decisions with regard to what those programs, personnel or products are doing and effecting".(p. 15). Ratman (1980) states that evaluation is "usually conducted to aid decision makers in providing alternatives for allocating resources, exercising accountability, formulating policy, and improving programs" (p.51). Cooley and Lohnes (1976) agree that evaluation is a process by which relevant data are collected and changed into information for decision makers. Levy and Nevo (1981) adhere verbatim to the Alkin definition of helping decision-makers through a formative process (data collection, analysis, and reporting). As does Madey (1982), who defines evaluation as "a process of classifying a set of information needs, and collecting, analyzing and reporting information to alleviate these needs" (p. 225).

Wolf (1984), although a protege of Robert Tyler, expressed an interest in Cronbach's definition of evaluation: "the collection and use of information to make decisions" (p. 2). Tawney (1976) also defines evaluation as a process of collecting evidence for decision-making as does Cooper (1976) who stresses that evaluation, in a British context, involves providing information for decision-makers. And Jenkins (1976), except for changing two words, reiterates Stufflebeam's definition: "Educational evaluation is the process of delineating, obtaining, and providing useful information for judging decision alternatives" (p. 6).

In acknowledging that both Stufflebeam and Guba stress evaluation as producing relevant information for decision- making, Cohen (1973), rather facetiously remarks that "decision-making, of course, is an

euphemism for the allocation of resources -- money, position, authority, and so on" (p. 97). Berk (1981) concludes that a critical survey of all definitions on evaluation have revealed a commonality among them all: evaluation is the process of providing information for decision-making" (p. 5). This statement is equally underscored and stated by Benedict (1973). Not only do the above mentioned writers expand upon this definition of evaluation as being to assist decision-makers through a formative process of collecting, analyzing, and reporting information to alleviate their needs, but also they link their definition to a fourth interpretation of evaluation. They also claim that the purpose of assisting decision-makers in allocating resources, exercising accountability and formulating policy is, in essence, to improve. Any researcher of educational evaluations is well aware of Stufflebeam's famous cliche': **the purpose of evaluation is not to prove but to improve.**

(iv) "A systematic examination conducted to assist in improving the program" (Cronbach et al, 1980, p. 14).

This is the fourth classification of evaluation by theoreticians and practitioners. Cronbach (1980) rejected the judgemental nature of evaluation; rather he advocated an approach that perceived the evaluator as "an educator (whose) success is to be judged by what others learn" (p. 14); that is, on the utility, feedback, and implementation of the evaluation for improvement -- not as one who decides who or what is right or wrong. He also used improvement of instructional programs as the main goal of evaluation.
This school of thought, led by Provus (1972); Wholey (1979); Wentling (1980); and Wolf (1984) partially rejects the judgement nature of evaluation and espouses an approach that perceives **the chief end of evaluation to be**

improvement. Wolf (1984) states that evaluation was to be seen as "supplying the information that will lead to the improvement of the institutional endeavour" (p. 14).

An eclectic definition of evaluation by Wentling (1980) is: "the collection of information and judgement to facilitate planning, to aid in the improvement of programs, and to meet accountability demands" (p. 19). By this definition, Wentling indicates what he considers the three major purposes of evaluation to be: to aid in decision-making, to improve service for students, and to ensure accountability (especially in expenditures). A similar view was expressed by Ingram and Milkos (1980) who enumerated four purposes of evaluation: (1) comparison to a standard, (2) making a judgement, (3) collecting information on decision-makers, and (4) defining questions to be answered. While they all prefer a more generalized expansive definition of evaluation that would include the collection of information to aid in decision making, to meet accountability demands, to improve service for students, and to compare performance and standard, there is, in their delineation of evaluation, a common thread. It was best expressed by Provus (1972) who pointed out that evaluation and decision-making were separate yet complementary functions, and that evaluation involved a commitment to improvement.

In summary, from the review of educational evaluation literature, the roles and activities of evaluation fall into four succinct categories and hence produce four definitions and purposes of evaluation, viz.

- **determining to what extent educational objectives have been attained (Tyler),**
- **determining merit and worth (Scriven),**

- **determining what <u>improvement</u> will assist programs instruction (Provus, Eisner), or**
- **determining or providing information for <u>decision-makers</u> (Stufflebeam).**

Aside from the four classifications of educational evaluation summarized above, there are still other interpretations of evaluation. For example, evaluation is often used as a synonym for accreditation and assessment. The former is a method of gauging the operations of an institution to ascertain if it conforms with some agreed upon standard; the latter, assessment, precedes the final decision-making stage in evaluation --- the decision whether or not to continue, modify or terminate a program (Anderson, Ball, Murphy, et al., 1975). The entire assessment must be planned in light of possible and plausible alternative decisions. Today, educational accrediting agencies in Canadian school systems (the only example being the British Columbia Ministry) concentrate on helping school systems assess their own strengths and weaknesses through self-evaluation of their own goals

As in all definitions, there are meanings that fall outside the established and accepted interpretations. For example, Lessinger (1970) equated evaluation to "educational engineering" in that school systems must accept accountability for their responsibilities, the first of which is the "care and nurture of the child" (p. 37). Viewing the multiplicity of definitions and interpretations of evaluation, Boruch and Cordray (1980) concluded that ambiguity was what was meant by evaluation. Does it mean, as they suggested, effectiveness? research? monitoring? systems management? decision theory? judgement?

A good evaluation will offer recommendations for improvement and, if realistic, will be sensitive to the possibilities for change. Evaluation, in itself, cannot improve anything unless its recommendations are implemented. And regardless of ulterior or political motives, there still remains the fact that recommendations can be implemented and monitored in order to foster desired improvements and change in a school system. The definition -- evaluation for recommended improvements -- is based upon the key question pertaining to any evaluation; namely, why evaluate? Since the focus of this study is school system evaluation, where goals, decision-making and judgement are significant evaluatory concerns, a definition today emphasizes improvement (both formative and summative) that will enhance a school system's economy, efficiency, effectiveness and excellence (as defined in Chapter 1, p.2,3).

Standards for Evaluation:

What is also significant in evaluation is the development of meta evaluation (an evaluation of the evaluation) as an instrument to check the quality of evaluation. A Joint Committee of twelve professional organizations issued a comprehensive set of standards for judging evaluation of educational programs and materials. Concerned with educational evaluation, the Joint Committee published in 1981 a document consisting of a set of thirty standards to be used to guide the conduct of an evaluation and to judge its soundness. The focus of the standards concerns widely shared principles for assessing the quality of evaluation, not rules or levels of performance. The thirty standards are grouped according to four attributes of an evaluation: **utility, feasibility, propriety and accuracy**; that is, evaluations that are

respectively responsive, frugal, ethical, and valid (to use but one example). The standards are guidelines only. They are not a framework or a model for evaluation --- they deal only with evaluation of programs, projects and materials. The committee's work did not end with the publication of the standards. It continues to conduct ongoing reviews [Madaus (1977), Stufflebeam and Shenfield (1985)].

To avoid problems presently encountered by vastly different methods, more attention must be given to performance standards in evaluation approaches and procedures. The thirty separate standards enumerated by the Joint Committee on Standards for Educational Evaluation (1981) encompassed valid and widely shared conceptions of evaluation and included certain intents and caveats. These standards are used to guide the conduct of evaluation and judge the soundness of each evaluation. Widely shared in the evaluation community, they are, as previously mentioned, principles for assessing the quality of an evaluation and have usually been applied to the evaluation of programs, projects and materials. The thirty standards are grouped into four activities:

1. **UTILITY**: ensuring that an evaluation will serve relative and practical informational needs to various stakeholders. This standard includes eight sub-units: audience identification and participation, evaluator credibility (trustworthy, competent), pertinent and responsive information, scope/focus, valued interpretations, the report's clarity (findings, purposes and procedures, described clearly and understood), dissemination (to clients), timeliness (on time), and the evaluation impact (follow-through being encouraged).
2. **FEASIBILITY:** ensuring three postulates; namely,

(a) the use of practical procedures (e.g., description to a minimum),

(b) political viability (analyzing different positions of various interest groups foster cooperation and to avoid disruption or counteractivity, realistic, prudent, diplomatic in process, and conducted with anticipation of positions of different interest groups in order to attain cooperation and avert any attempts to curtail, to be bias, or to misapply results).

(c) cost effectiveness (frugal) and workable in real situations.

3. **PROPRIETY**: ensuring that the evaluation is being conducted legally, ethically and with due regard for the welfare of those involved in and those affected by the evaluation. This standard includes eight sub-units: a formal written agreement, conflict of interest, open, full and frank disclosures, the public's right to know, rights of individuals (respected and protected), individual interactions (respecting dignity), balanced (fair and complete) reporting, and sound fiscal accountability.

4. **ACCURACY:** (ensuring that the report reveals and conveys adequate and sound information, technically adequate with logical conclusions regarding worth and merit). This standard includes eleven sub-units: clear identification and analyses of specific object(s), defining purposes and monitoring, describing procedures, defensible information services, valid information, reliable measurement, systemic data control, proper analysis of data to support interpretation, objective reporting, justifiable explicit conclusions (Stufflebeam & Madeus, 1983) and protection against distortions and biases.

All four activities are extremely important to any evaluation and

can serve as standards by which to direct any evaluation and gauge its utility, feasibility, propriety, and accuracy.

In relation and comparison to the above,Stufflebeam (1968) has seen four qualities as crucial to an evaluation: validity (is the information **feasible** and relevant to what the decision-maker needs?), reliability (is the information **accurate** and reproducible?), timeliness [is the information available, pertinent, etc. (qualities of **utility**) when the decision-maker needs it?], and credibility (is the information responsible and trusted by the decision maker and those he must serve; that is, does it have the qualities of **propriety**? Robert Wise (1968) also enumerated a set of standards against which evaluation quality could be assessed: honesty, accuracy (validity), currency (applicable at the time), relevance (speaks to interests), specificity and comprehensiveness.

Following these guidelines, evaluators of school systems can serve the practical information needs of a given audience and conduct realistic, prudent and frugal evaluations that are ethical and valid in reflecting the various interactions of the school system (Boruch & Cordray, 1980). Furthermore, choosing, developing and implementing such procedures ensures that the interpretation and result of the evaluation is valid and that it provides clear, fair, useful, timely, objective, credible and explanatory results for the given user (Dinkel et al,l982). Evaluations must meet the standards of utility, be informative to practitioners, and make a desirable impact on their work (Stufflebeam, 1974).

3.3

Current Evaluation Practices in the United States

Mixed Results / Little Change:

Much of the public concern through the 1970's and into the 1980's focused on declining standards, accountability, and "matters indicative of the fear that schools were not doing a good job on 'quality' control" (MacLean, 1985, p. 47). Yet, as Madeus (1982) indicated, the paucity of pre service and in-service training opportunities in evaluation was deplorable. Although numerous journals had been started and a great deal of professional development did occur, the results of such contributions brought mixed reactions. Guilty of a lack of communication or "too much chatter" (Cronbach,1981), criticized as being " a narrow and exclusive club" (Stake 1983), fraught with division between the American Educational Research Association (AERA) and the Educational Research Society (ERS) networks (Madaus, 1982), and embattled with positivistic (quantitative) and phenomenological (qualitative) wars, the field of evaluation -- even with its new approaches, led Stufflebeam and Shenfield (1985) to conclude that "the actual practice of evaluation has changed very little in the great majority of settings" (p.24).

While evaluation had emerged as a distinct profession, the process was clouded by doubts of its role, by problems of articulating standards and certification, and by its lack of stature among professional educators. There is no problem to find evaluation literature, the problem is to keep up with it. Sole reliance on formal true experimental procedures has been strongly rejected; more emphasis is now being placed on the logic of design than on adherence to a narrow set of procedures. Evaluation is now seen as an open and ongoing process -- intended to yield information that will

lead to the improvement of educational programs (Wolf, 1987).

Although many of the concepts of writers over the past twenty years have been recognized as valid, no single prescription or no one paradigm of educational evaluation has been accepted or abandoned. Therefore, recommended to anyone entrusted with the responsibility of an evaluation is his/her use of a variety of approaches. The complexity of the object (the school system), and the multiple factors of causation and outcomes produced by the interaction of system components, substantiate the need for a school system evaluation comprising salient components garnered from the results of a study such as this. In such a literature review process, names such as Stufflebeam, Stake, Alkin, Popham, Guba, Tyler, Scriven and Conbach, etc., become commonplace as do the more generally known organizational effectiveness writers as Steers, Mott, Johnston, Beer, etc., and a multitude of school effectiveness proponents from Araisan to Walburg. From such a wide range and variance of educational evaluation and school system literature, essential components to comprise a new model of school system evaluation can be synthesized.

3.4

Current Evaluation Practices in Canada

A Provincial and National Overview:

According to Raphael (1988), a number of Canadian provinces including British Columbia, Alberta, Saskatchewan, Manitoba, New Brunswick, Newfoundland, Nova Scotia and Quebec have some form of evaluation, assessment or testing programs for students, schools, or school systems. At present (1993), while four provinces (Quebec, Alberta, British Columbia and

Nova Scotia) still claim to be active in school system evaluations, such activity has decreased greatly and very little system-wide evaluation is being done. Quebec's participation in school system evaluations is through its yearly publication of the examination results of each provincial school district which, in turn, publish their results school by school.

Although still providing procedural manuals for the management and guidance of school, school systems, program, and teacher evaluations, Alberta Education (1990) has recently put forth an evaluation model package called EQI (Education Quality Indicators) as a means to assess the quality of the educational system. Developed in collaboration with twelve school jurisdictions in six provincial zones, this collegial model puts forth a set of major indicators to measure the success of the educational enterprise in the province. To assess whether or not the Alberta School System is being efficiently evaluated, two key questions are posed: (a) Are students learning to their potential? and (b) Is the system supporting students learning efficiently and effectively? The Albertan evaluation process comprises a conceptual framework consisting of a set of indicators and methodology. The evaluation format includes a three-fold framework of **(1) <u>indicator systems</u>** as (a) context, input, process, (b) student outcomes, and (c) points of reference (time, groups, goals), **(2) <u>methodology</u>** consisting of (a) appropriate data sources (e.g. review of literature, identifying needs), (b) collection procedures (surveys, interviews) and (c) analytical procedures to analyze and interpret information, and **(3) a reporting and dissemination strategy** to inform diverse audiences of the results.

British Columbia utilizes an accreditation process characterized by an internal and external assessment in the initial and final stages

respectively of its evaluation process. This process consists of four steps: (1) problem identification (purpose, objectives, and programs), (2) design (data collecting, personnel, and process), (3) follow-up (implementation), and (4) long-term follow-up. The B. C. Accreditation approach evaluates the philosophies and purposes of the administration/ management and community in order to assess their relationship to the intellectual, social, human, and vocational objectives of the school system. By looking at these present practices, the evaluators determine their effectiveness in terms of their accessibility, relevance, fiscal responsibility, professional attributes, accountability, and management. If improvement is needed, the report indicates what should be done. The B. C. evaluation goal is to sample one-sixth of the schools and/or districts yearly.

Over a fourteen year period ending in November, 1991, the Nova Scotia Department of Education has completed the evaluation of all school districts but one: Colchester-East Hants. The variables used in these evaluations have consisted generally of six elements; namely board/ administration, finance, curriculum, student, property, and conveyance services. In lieu of financial restraint and shifting philosophies, it appears doubtful as to whether Nova Scotia school system evaluations will be continued.

Another major reason for the cessation of school system evaluation across Canada has been the shift nationally to assessing student achievement (The Ministries/Departments of Education of Quebec, Alberta, British Columbia and Nova Scotia, Nov.-Dec., 1991). Educational Ministers from across Canada "have reached an agreement on nationwide school tests ... lauded as a breakthrough for education in Canada" (Halifax Mail-Star,

December 10, 1991). As a result, all provinces have been involved in developing National Standard Indicators for the nationwide pilot school test samples to be administered to 13 and 16 year olds. The purpose of these tests is to assess student proficiency in science and mathematics. These tests began in 1992 as a pilot project. In 1993 and 1994, a much larger sample of both these age groups is to be taken.

The Ministries/Departments of four provinces (Quebec, Alberta, British Columbia and Nova Scotia), while still involved in various degrees in school system evaluations, have, as indicated, greatly decreased such activity to the extent that very little system-wide evaluation is being done. This reality is represented graphically on the following page in Table 3.1 which highlights the situation in these four provinces, as well as presenting the current status of school and school systems evaluation in all provinces in Canada ,

Table 3.1

PRESENT STATUS OF SCHOOL AND SCHOOL SYSTEM EVALUATION IN CANADA

Province Territory	School Evaluation	School System Evaluation	PARTICULARS
1. Newfoundland and Labrador	Yes	No	The 35 school districts assume own responsibility. Department of Education provides consultative services, in-service, and technical assistance to system personnel re program and school systems evaluation. School (statistics) available - not for evaluation but for schools to use in their own improvement efforts. School and school system evaluations involve reporting the results of standardized tests and exams.
2. Nova Scotia	No	Yes	Only one school system in past decade not evaluated, viz. Colchester-East Hants. Current implications (chiefly cost) negate any further school system reviews. Recent change in emphasis from school systems assessment to curriculum (program) reviews and standardize testing results (Gr.9&12).
3. New Brunswick	Yes	No	Individual and cooperative evaluation criteria manuals have been established for elementary, junior and senior high schools. Focus of evaluation deals with instruction, goals, climate,administration, student evaluation, and programs.

Province Territory	School Evaluation	School System Evaluation	PARTICULARS
4. Prince Edward Island	No	No	No procedures in place.
5. Quebec	Yes	Yes	Solely by the publication of examination results of school districts which, in turn, publish results school by school.
6. Ontario	No	No	In past years, very involved in school system evaluation. Since 1988, a shift in emphasis to the evaluation of specific "new" courses annually developed and implemented by the Ministry of Education.
7. Manitoba	Yes	No	System and program reviews are achieved through data on student achievement; i.e., through standardized testing of district.
8. Saskatchewan	Yes	No	The Saskatchewan School Improvement Program (SSIP) identifies specific areas--leadership, goals, climate, curriculum, instruction, collaboration, community involvement, etc. Strong emphasis is also placed on change theory and effective schools literature.

Province Territory	School Evaluation	System Evaluation	PARTICULARS
9.Alberta	**Yes**	**Yes**	Procedural manuals available for the management of: (1) school evaluations, (2) school system evaluations, (3) program evaluations, and (4) teacher evaluations.
10. British Columbia	**Yes**	**Yes**	A very weighty accreditation process for school systems and secondary schools is based on 4 goals (intellectual, social, human and vocational development of students) and 6 attributes (accessible, relevant, fiscally responsible, well-managed, professional and accountable) that constitute a framework to assess a "quality educational system".
11. **Yukon Territory** (accreditation)	**Yes**	**No**	No school districts in operation. Uses B.C. procedure for school evaluation.
12.**Northwest Territories**	**No**	**No**	Appropriate procedures are being worked out to indicate evaluation activities using the Alberta Education model. Responsibilities are delegated to local boards and divisional Boards of Education

[Source of Data: Provincial Departments and Ministries of Education, October-November, 1991]

Summary:

Educational evaluation which began in this century with standardized testing, school inspectors, and the subsequent accreditation of schools has experienced, throughout the past decades, a history of change. Changes in society's perception of education, as alluded to in the introduction, have been mirrored by the myriad of divergent educational evaluation strategies, methods, and techniques that have been developed. Evaluation models have range from those conceptualized by educational evaluation theorists to those promulgated by industrial institutions. Usually these evaluation models have been outgrowths of reactions by professional educators or evaluation experts to growing demands for accountability, as a result of compensatory programs, and the infusion or restraint of government expenditures on education.

Four definitions of evaluation have been determined from the review of literature pertaining to educational evaluation: Evaluation has been defined as (1) a determinant of goal assessment, (2) a measure of merit and worth, (3) the provision of alternatives for decision making, and (4) a blueprint for improvement. Established standards of utility, feasibility, property, and accuracy provide guidelines for the conduct of evaluations and for their outcomes.

A general overview of current evaluation practices in the United States reveals little change in educational evaluation and reaffirms the incessant focus and direction of educational evaluation to programs and projects, usually of curriculum, teachers or individual schools. There still exists, however, a lack of specific direction in school systems evaluation. Research indicates a growing emphasis on the importance of the **individual, environment, and the organization.** Although no one paradigm has

been generally accepted, a great deal of emphasis has been placed on these three school system variables.

A study of current Canadian practices reaffirms that there are only four provinces (Quebec, Alberta, British Columbia, and Nova Scotia) active in school system evaluation. Closer examination, however, reveals that the degree of their participation varies. For example, Quebec's participation amounts simply to the publication of provincial and local student test results. Alberta's involvement is chiefly in producing evaluation manuals for self-evaluations by teachers, schools, and school districts. Nova Scotia has, through its Department of Education, indicated that it will be discontinuing its school systems surveys/reviews (Lawson, 1992). The only province truly involved in school system evaluation is British Columbia through its annual accreditation of selected school systems. In most school districts across Canada, the emphasis now seems to be on the evaluation of curriculum with the most recent introduction by the Council of Education Ministers of "National Standard Indicators" to test all Canadian students in particular subjects and at particular grade levels.

[***The data results from the review of the literature relative to educational evaluation studies are graphically detailed at the end of the next chapter***]

CHAPTER IV

REVIEW AND ANALYSIS OF THE MODELS OF FIVE MAJOR THEORISTS OF EVALUATION

4.1

A Review of Evaluation Models of Five Leading Theorists

Introduction:

The chapter develops the second purpose of this study; namely, analyzing the evaluation models of five leading evaluation theorists in order to ascertain the suitability of their approaches for and the contributions they may render towards the conceptionalization of a new approach to the evaluation of school systems. These five theorists, selected because of their continued prominence and permanence in the theory and practice of educational evaluation, are (with their models in parenthesis): Elliott Eisner (**Educational Connoisseurship and Criticism**), Malcolm Provus [**the Discrepancy Evaluation Model (DEM)**], Michael Scriven [**Consumer-Oriented and Goal Free Evaluation (GFE)**], Robert Stake (**Countenance-Responsive Model**), and Daniel Stufflebeam (**CIPP Model: Context, Input, Process, Product**).

In critiquing each of these five approaches to support the formation of a more appropriate approach for the evaluation of school systems, the concepts and applications of these five theoretical models for educational evaluation are reviewed in this chapter. First, the models are classified under headings that depict their unique purposes and relate to the stated definitions and purposes of evaluation (Chapter 3). Then, in order that

the meaning of each of the five models can be clarified to delineate their various approaches and concepts, the descriptions, purposes, applications, strengths, and weaknesses of each of the approaches are specifically outlined. As a result, this framework sets up a means whereby linkages are made with each of the five models and, more specifically, with the development of a new approach towards school system evaluation. A summary of each model is given at the end of each section of the chapter.

Classifications:

As stated in Section 3.1, the decades of the 60's and 70's were very productive in the conceptualization of educational evaluation models. As a result, there are many typologies of evaluation models. Many writers [Benedict (1973), Worthen and Saunders (1973), Popham (1975), Jenkins (1976), Hanson (1978), and House (1980)] and theorists themselves, [MacDonald (1976), Stake (1976), Stufflebeam et al. (1980), Guba and Lincoln (1981) and Patton (1982)] have attempted the classifications of evaluation models -- either to put some order to the many existing approaches, or to analyze their similarities and differences. For example, Guba (1981) outlined four major schools of education evaluation: (1) objectives (Tyler), (2) outcomes (Stufflebeam and Alkin), (3) effects (Scriven), and (4) concerns/ issues of audiences (Stake and Wolf). Other writers, like Popham (1975) and House (1980) classified according to the facilitating uses of evaluation: namely, judgemental (summative or formative), decision-making, goal attainment, and program-change monitoring; that is, selecting one major dimension and from it developing sub-classifications.

In categorizing, there is always the problem of rendering injustice

to each model by ignoring many of its major characteristics. In attempting a similar task in this study, however, one conclusion already established is that evaluation models may be categorized according to the four definitions of evaluation derived from the literature relating to educational evaluation [Chapter 3, pages 38-44)]. Educational evaluation, it was posited, tends to be defined by researchers in direct relation to the specific role perceived for evaluation or the results anticipated from it. In other words, the way in which one defines evaluation has a direct relationship to the process and approach that is followed. From the review of educational evaluation literature as delineated in Chapter 3, the models of the five leading theorists fall into four succinct categories that parallel the four definitions and purposes of evaluation:

DEFINITIONS

GOAL ASSESSMENT

(i) "determining to what extent educational objectives have been met", (Tyler, 1950, p. 69) ... **by a comparison between performance and standard** (Provus,1971)

DECISION-MAKING

(ii) "providing information for decision-making in choosing alternatives" (Stufflebeam et al, 1971, pg. 27)

JUDGEMENTAL

(iii) "determining of merit and worth" (Scriven, 1981, p. 14; Stake, 1967).

IMPROVEMENT

(iv) "A systematic examination conducted to assist in improving the program" (Cronbach et al, 1980, p. 14), (Eisner, 1972).

Based on the above definitions, this study posits four general categories (Table 4.1) for evaluation models; viz., those that have an **objective/goal base** (i.e.,assessing goals or objectives) those that are **information based** (i.e., directed to providing alternate strategies for decision making), those that are **judgemental based** [i.e., assessing merit and worth for client and/or consumer)], and those designed to evaluate and promote educational change and **improvement.**

Table 4.1(a): CLASSIFICATION OF MODELS BY DEFINITION

Major Descriptor	Definition	Model	Theorist
INFORMATION BASED	"providing decision-makers with suitable alternatives" E = DM [Evaluation (E) is (=) Decision Making]	C.I.P.P	Stufflebeam
GOALS/ OBJECTIVES BASED	"congruence between standard & performance" E = P=O [Evaluation (E) is (=) the congruence between (=) performance & objective]	DEM	Provus
JUDGEMENTAL BASED	"determination of merit and worth" E = PJ [Evaluation (E) is (=) Professional Judgement(PJ)]	GFE Responsive	Scriven Stake
IMPROVEMENT BASED	"examining to assist in improvement and change" E = C & I [Evaluation (E) is (=) Change & Improvement]	Connoisseurship & Criticism	Eisner

Often a thin thread separates the purposes of evaluation

approaches. Whereas the information-decision based **CIPP** (Stufflebeam) and objective-based **DEM** (Provus) paradigms are similar in their major function of providing alternate forms of information for decision-makers or other clients, **judgemental-based evaluation** approaches are sub-divided into those that are (a) **client or consumer oriented** and those which are (b) **professionally oriented** [a differentiation of purpose as outlined in Table 4.1(b)].

Table 4.1(b): CLASSIFICATION OF MODELS BY PURPOSE

CATEGORY 1	CATEGORY 2	CATEGORY 3a	CATEGORY 3b
Decision-Making	*Goal Assessment*	*Judgemental*	
INFORMATION DECISION BASED STUFFLEBEAM (CIPP)	OBJECTIVE/ GOAL BASED PROVUS (DEM)	JUDGEMENTAL BASED CLIENT/PROFESSIONALLY STAKE (*client*) (Countenance-Responsive) SCRIVEN (*consumer*) [Goal Free]	JUDGEMENTAL BASED CONSUMER-ORIENTED EISNER (Educational Connoisseurship & Criticism

CATEGORY 4
Improvement
ALL MODELS ARE DESIGNED FOR *IMPROVEMENT*
The processes of all models are designed to strengthen and improve a school system and its component parts whereby the quality of education and hence, the performance of all students can be enhanced.

The differentiation in the categories lies in the fact that the judgemental based (client-based) evaluation models of Stake, Scriven, and Eisner (Categories 3a & 3b), unlike the decision-making/ information and objective/goal based models of Stufflebeam and Provus (Categories 1 & 2), judge the effects of programs on stakeholders and do not focus solely on information for decision making or goal attainment. Information/decision-making and objective/goal based models stress program and goal intents;

judgemental based models stress program activities and program participants (Schermerhorn and Williams,1979). Scriven's assertion (1967), as is Stake's (1967a, pg. 527), is that the business of the evaluator is not merely to accumulate data, but to judge. Berk (1981) and Benedict (1973) claim that the purpose of assisting decision-makers in allocating resources, exercising accountability and formulating policy is, in essence, to improve (Category 4). Any researcher of educational evaluations is well aware of Stufflebeam's famous cliche': **the purpose of evaluation is not to prove but to improve.**

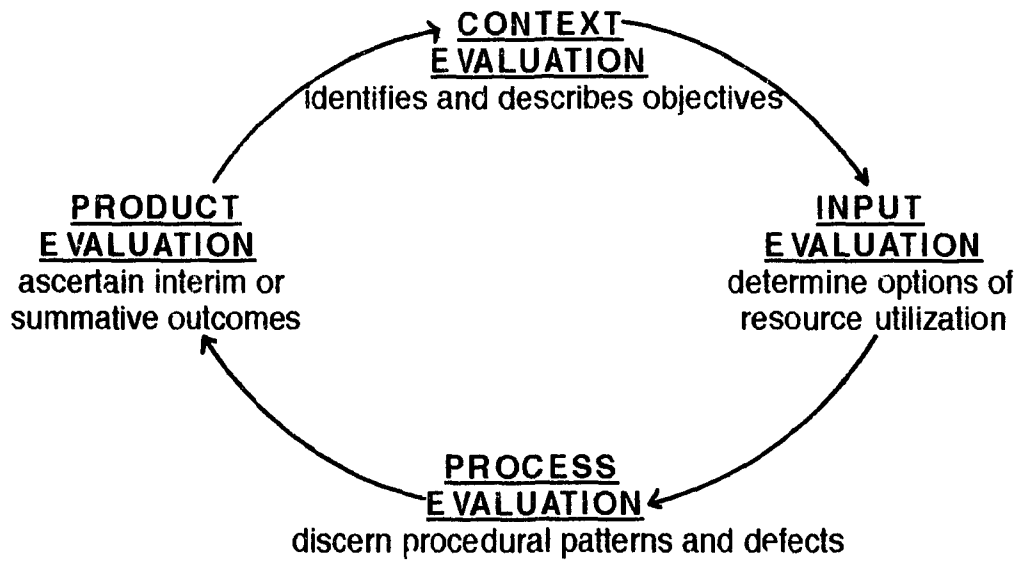
4.2

Theorist#1 : **Daniel Stufflebeam**
MODEL: **C.I.P.P. (context, input, process,product)**
CATEGORY 1: **Information/Decision Based Model**

Description:

The first of the evalulation models of the five leading theorists to be analyzed is the C.I.P.P. model. The **C.I.P.P.** model, a decision making approach, was developed by **Daniel Stufflebeam** who envisaged evaluation as a systematic study, designed and conducted to assist a specific client group in trying to improve some object. The model consists of four distinct elements: **context**, **input**, **process**, **and product** (Figure 4.1).

Figure 4.1: **STUFFLEBEAM'S CIPP MODEL**
[As derived from Stufflebeam (1983)]



Stufflebeam (1967) posited that each of the four stages of the model functioned to provide data that involve **context** --- a thorough description and identification of needs and goals, **input** --- the employment of

resources, appraising alternatives and designing procedures to reach goals, **process** --- discerning defects in the implementation of the goals, and **product** --- measuring, monitoring, and determining outcomes of the goals. Conceived originally as a Process-Product model, the Context and Input dimensions were added later in response to managerial queries for assistance.

The context, input, process, and product format is similar to the CSE (Center for Study of Education) model conceived by Mervin E. Alkin (1972) and used to measure program effectiveness. Popham (1975) described this approach is "a process of determining the kinds of decisions that have to be made: selecting, collecting and analyzing the information needed in making these decisions and reporting the information to appropriate decision makers" (p. 37).

Purpose:

The model's major purpose and process, as defined by Stufflebeam et al. (1971), was to delineate, obtain, and provide useful information for selecting decision alternatives. Beginning in the early 1960's, decision-making was of immediate concern, particularly regarding improvements of facilities, teachers, and programs. Conceptualized as a result of attempts to evaluate projects and programs funded through the Elementary and Secondary Education Act (ESEA) of 1965, the CIPP model was developed at the University Evaluation Center of Ohio State University to replace the Tylerian behavioral- objectives model -- one that defines objectives, relates them to behavioral experiences and assesses the results. Stufflebeam and Webster (1988) acknowledge that the purpose of the CIPP model (to guide decision making) would replace the

objectives/goal approach of Tyler and Smith (1942) by (1) assessing variables or needs (context), (2) developing plans (input), operations (process), and results (product), (3) stressing evaluation as communication as well as information-gathering, and (4) guiding the success of a program (p. 570).

Since 1965, billions of dollars have been allotted for improving the education of disadvantaged students and upgrading total systems. Inexperienced educators, required to evaluate such funded projects, discovered there were no designs available. At the Ohio State University Evaluation Center, Stufflebeam developed CIPP for such a purpose.

The overall purpose of the CIPP model is mainly to provide data (usually alternate strategies) to educational decision makers in order to guide them in making decisions (Stufflebeam et al., 1986). Each of the four elements of the model exemplifies this purpose: context (providing information to determine needs and goals), input (providing information to determine resource options), process (providing information to determine congruities or discrepancies), and product (providing information to determine outcomes).

Applications:

Gavilan and Ryan's (1979) application of CIPP was to assess a competency based master's degree program in **counselor education.** Although all four components were utilized in their study, the researchers concluded that on-going feedback and response between evaluators and decision makers were more important than the processes.

Another instance of a similar program took place at Florida State

University where the objective was to develop and field test an evaluation model for competency-based education called **FACIT** (Florida's Approach to Competency- Based Individual Teaching). The researchers under Hinley (1979) had problems with the materials so they sought another model to evaluate the program. After an in-depth review of evaluation models, they selected CIPP. CIPP, however, did not provide the guidance in description of programs to be evaluated or the procedures and processes necessary to direct the evaluation. They, therefore, developed their own guidelines by incorporating Stake's model.

Ingram and Miklos (1980) utilized the CIPP framework by producing a source book for evaluating school districts. The study was developed specifically to help decide the problem of whether or not small Catholic school districts in Alberta should continue to operate. The authors indicate the different aspects of school systems that can be evaluated under the criteria of context, input, process and product. Each of the four criteria is similar to a systems perspective of evaluation in school districts, but only in their terminology. The authors advise that, while each criterion may be done individually, the evaluation should be done comprehensively and systematically to involve all four elements of C.I.P.P. collectively if decision makers are to be assisted in choosing correct alternatives. The process component is especially aimed at identifying strengths and weaknesses in an alternate operation --- an analysis of great value to implementing change in the school system. The evaluation is carried out by asking a number of questions concerning school systems components in relation to the decisions that are to be made.

A wide application of Stufflebeam's approach has been seen in

the school districts of Columbus, Toledo, Cincinnati, Dallas, Fort Worth, and Houston, where it has been used to provide alternate choices of programs and projects (chiefly funded by the U. S. Office of Education) at a reasonable cost.

Quite significant is the fact that CIPP was designed chiefly to evaluate projects funded through ESEA, Title I, and compensatory education initiatives. Its use, almost categorically, has been to evaluate programs (curriculum "packages") and instructional units developed under federal funding by the U. S. Office of Education --- specifically, to render alternatives in applying a decision of whether a program or project should be initiated, sustained or aborted -- but by the decision-maker, not the evaluator. Stufflebeam (1983), himself, acknowledged that the usual application of input evaluation was the preparation of a proposal for submission to a funding board, and that product evaluation has usually been used to measure the attainment of a program. While the model may appear sophisticated and complex in its four tier strategies, it is, in essence, often a recipe for Title I projects., viz, context (review relevant literature), input (visit exemplary programs), process (consult experts), and product (have a decision seminar, write a proposal, or evaluate the project).

Strengths:

As exemplified from the application by Ingram & Miklos (1980), Stufflebeam's CIPP model, in its use of three of the very basic principles of a system (input-process- output) does bear some similarity to school systems evaluation framework. Tuckman (1979) acknowledged this fact and made the three educational variables correspond to various units of a school system; for example, input (finances, facilities, teachers and students), process (climate,

behavior and instruction), and output (attitudinal and achievement attainments). Consequently, the CIPP model is in line with a systems view of education in that its four component parts are similar to some of the major components of a system perspective. Ambry (1979), who used the Stufflebeam approach in his evaluation for environmental education also classified " CIPP model as being close to a systems approach.

Stufflebeam (1974) emphasized the need for evaluators to heed all the standards of evaluation; that is, that their evaluations had technical adequacy, reliability, validity, and practicality, were unbiased, cost effective, and promoted ethical practices (protection of rights, privacy, legality, etc.). Stufflebeam cautioned evaluators to consider all procedures and attempt to balance criteria to avoid any conclusions being inadequate, unfeasible, or indefensible (Stufflebeam et al., 1985).

Stufflebeam et al. (1985) list over twenty examples of procedures for information gathering techniques. These techniques range from needs assessments procedures to examples of selected measurement instruments for acquiring and recording information from various sources.

Aikin (1969) and Stufflebeam (1970) had stressed that evaluation was the process of ascertaining the areas of concern, selecting appropriate information and collecting and analyzing information in order to provide alternative solutions for decision makers. As a result, Stufflebeam et al (1971), in the Phi Delta Kappa Commission on Evaluation, defined evaluation as "**the process of delineating, collecting and providing information useful for judging decision alternatives**" (p.27). The CIPP model resembles the administrative/rational decision-making model found in most educational administration textbooks. Providing information for

decision making is now a widely accepted reason for evaluation studies (Leithwood, Wilson and Marshall, 1981).

Weaknesses:

Critics of the CIPP model describe it as being too subjective, too narrow, and valid only in its utility to decision-makers (House,1980). Like most decision making oriented models, it is susceptible to biases, concerns, and values of the education establishment (Scriven,1981).

The evaluation domain is determined and directed by the decision-maker; consequently, the objects, methodology, values, and process of evaluation, even as refined by Alkin (1972), are still unclear. As a result, CIPP is generally criticized for its lack of sufficient guidance in describing guidelines for programs to be evaluated. Specifically, there are no sequences of steps for conducting the evaluation.

Stufflebeam concedes that his model serves only high-level decision makers (e.g., superintendent, staff and board) and that the information requirements are determined solely by clients of the evaluation. Moreover, the results are often interpreted as reinforcing the objectives of the clients without evaluating them in a broader framework of values. Its utility value -- even decision emphasis -- is for managers only. Such an evaluation approach enhances the power and influence of the superintendent and his staff without helping others in the internal and external communities. The results, therefore, lack shared conceptions among stakeholders. (Stufflebeam and Webster, 1988). The evaluator's job is to supply information and methodologies to defend a decision and since the administrators are the decision makers, the model, therefore, is for managers, economists and

government officials, not stakeholders. The model is obsessed with cost analysis of process; "reasonable cost" being a dictum in the planning, developing, and execution of a given program.

The four elements of the model: context, input, process, and product are often performed separately since they are interchangeable in their goals as the evaluation process progresses (Ingram & Miklos, 1980). Furthermore, as each element of the process is done separately, the systematic, holistic, and interactive evaluation approach is lost; for example, the process evaluation segment is aimed at identifying the strengths and weaknesses internally and ignores any external system (environment). Again, the input segment is more in structuring the exercise of evaluation design rather than a compendium of evaluative components. All school system components, therefore, are not evaluated and the continuum of the evaluation fluctuates as a result. Like other models, as Stufflebeam and Shenfield (1985) state, it forms but "a part of the total mosaic of the informal and formal evaluation of any school system " (p. 168).

The CIPP model is proactive and formative as an evaluation instrument for decision making; it is retroactive and summative as an evaluation for accountability.

A Summary of the C. I. P. P Model:

Below are given, in summary form, the important aspects of Stufflebeam's CI.P.P. (Content/ Input/ Process/ Product) model, an information/decision based approach to evaluaiton.

1. **THEORIST:** Daniel Stufflebeam (1970)

2. DESCRIPTION: CONTEXT(describing and identifying the objective or need), INPUT (developing and determining the options), PROCESS (discerning the discrepancies) and PRODUCT (ascertaining outcomes)

3. PURPOSE: provide alternate solutions for decision makers, assessing programs for improvement, effectiveness & quality control, planning and executing of programs at reasonable cost for decision makers, administrators, economists, government officials,etc.

4. APPLICATION: chiefly in compensatory programs and Title 1 projects through surveys, questionnaires,interviews

5. STRENGTHS: rational DECISION - MAKING model; systems "format" compatible

6 WEAKNESSES: too subjective, biased, unclear, no sequential steps, little guidance

4.3
Theorist #2: MICHAEL PROVUS
MODEL: DISCREPANCY EVALUATION [DEM]
CATEGORY: GOAL/OBJECTIVE BASED

Description:

The DISCREPANCY EVALUATION MODEL (DEM), conceived by Malcolm Provus (1971-72), is the second model critiqued in this chapter. The model (Figure 4.2) advocates: (1) developing and defining standards for evaluation, (2) determining, by using these standards, whether or not a discrepancy exists between some aspect of program performance and the standards governing it, and (3) using this discrepancy information either to change the performance or to alter the standard. Provus (1971) emphasized that the determination of discrepancies that occur between designated standards and actual performance constituted valuable feedback to decision makers for change and improvement, and were the best basis for estimating the eventual success or failure of a product at an early stage.

Figure 4.2: DISCREPANCY EVALUATION MODEL (DEM)

STEP #1: DEVELOP & DEFINE **STANDARDS**

|

STEP #2: ASSESS **PERFORMANCE**

[i.e., **comparison** BETWEEN PERFORMANCE & STANDARDS]

to determine

DISCREPANCY

|

STEP # 3: **FEEDBACK**

(information for decision-makers)

DECISION

(alter? change? terminate?)

Once program standards have been defined and developed, the process is one of determining whether or not a discrepancy exists between performance and standard; in fact, the process is a continual collection of information at various stages about performance relative to established standards. Comparison is made between performance and standards at each stage (design, process, etc.). If the comparison shows a difference (i.e., a discrepancy), a decision is made to change or adjust the discrepancy or standard. Provus (1972) stipulated that such an evaluation approach involved frequent feedback ["recycling throughout the stages" (p. 123)] in order that the discrepancies found could be used for change and improvement in both standard and performance. Ultimately, such disclosure could determine eventual success or failure of a program/project at an early stage. Provus (1972) is dogmatic in this viewpoint, stating "that there can be no evaluation without discrepancy information .... no discrepancy without a standard" (p.118).

Purpose:

Provus (1972) posited that "evaluation at its simplest level may be seen as comparison of performance against standard" (p.117). The major task, therefore, of an evaluator is to obtain standards. Provus (1971) saw as the purpose of evaluation "to ensure the quality of the product at minimum cost and to help management make decisions" (p.12). The purpose of the DEM model is to provide information or decision-makers but not by usurping the judgement of an evaluator.

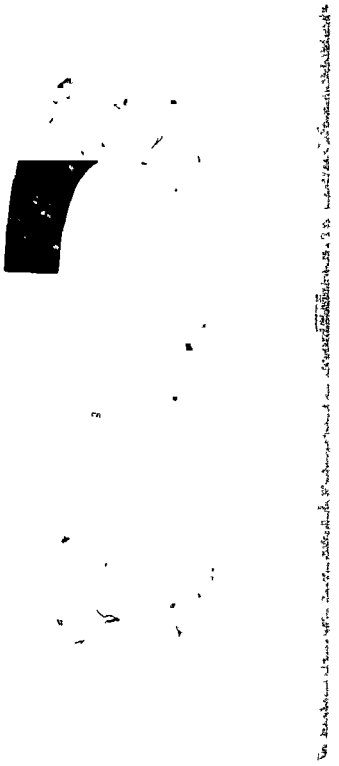
Application:

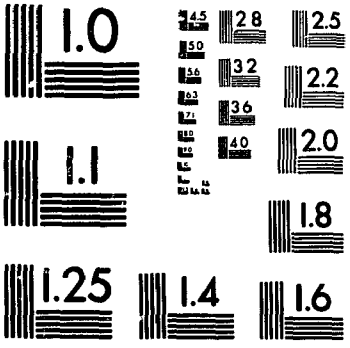
Using the D.E.M. model, the Association of California School Administrators

[ACSA] (1982) conducted an evaluation of all certified personnel in their school districts in relation to the **Stull Act of California** that required teachers to be assessed in accordance with expected student achievement. The ACSA used the discrepancy model to diagnose student needs by assessing the discrepancies between what is and what should be. To enhance student growth, one of the processes developed to mitigate the discrepancies was a Performance Evaluation and Appraisal of Certified Staff. The role of each person was evaluated through the **DEM** model [goals + standards for performance = appraisal (by comparison for discrepancy)]. While the study suggested that an evaluation of discrepancies between what is and what should be in student achievement would judge the performance of certified personnel, the evaluators concluded that no single appraisal design would suit the study. The difficulty in utilizing DEM rested on the specificity of standards and the acceptability of objectives -- both of which were defined as the responsibility of the clients.

D. J. Cichon (1983) delved into this problem in his utilization-focused procedure for **prioritizing questions** in the Discrepancy Model. Cichon concluded that the procedures for generating questions relative to standards from DEM literature were problematic and led to unmanageable and inefficient evaluation. To facilitate the process, Cichon narrowed down the list by using other sources, concentrating on outcomes from each stage of an evaluation, and assessing their usefulness by questioning program staff. Their responses and concerns were used to stimulate discussion, formulate evaluation questions, and underscore priorities of evaluation.

Leon Jones (1979) explored the extent of educational service provided by educational evaluations. Through an outline of the development





of educational evaluation research and practice, Jones compared formative and summative evaluation techniques. In reviewing the Discrepancy Evaluation Model (DEM), Jones examined its nature and application, how it was conducted, where it should be implemented, where it is conducted, and who implements the process. Defining DEM's purpose as similar to CIPP (i.e. providing useful information for decision- making), Jones revealed the negative effects of the model that had been perpetrated by Provus, Stufflebeam and their contemporaries: Peter Rossi, Howard Freeman, and Sonia Wright. Specifically, Jones concluded, from his general analysis of educational evaluation approaches, that the model was parochial and profit oriented, not responsive to consumer needs and, in reality, a blatant dichotomy in that the evaluator and decision maker carried out independent functions. Following DEM guidelines, the evaluator must refrain from disrupting the program manager, yet s/he must consult with the decision maker throughout the development of a proper evaluation design. When data generated was a product of team work, the process was generally accepted; however, when objectives were operationalized or transformed into behavioral or measurable terms, the model was viewed as threatening and potentially destructive. Therefore, to Jones, DEM becomes " a menace if the evaluator's role is woven into the decision-maker's role. A watchdog phobia results! " (p.17).

Strengths:

Like the system approach to evaluation, Provus' design still follows the basic system theory concept of input, process and output in its concepts of standards, performance, and comparison. Provus' (1972) major contribution

is an organizational paradigm which "makes these [three] intricate and demanding relationships understandable [by emphasizing] an action system which contains a feedback loop" (p.118).

The feedback loop (common in systems theory) assists in detecting discrepancies and is one essential system evaluation characteristic that is part of the model. Wiles and Bondis (1993) emphasize that an evaluation feedback cycle is the "means of regularly assessing programs and taking corrective action when findings are unsatisfactory" (pg. 237). If the evaluator does not consider the discrepancies existing between performance and expectation (standard), the resulting assessment is of little importance. By stressing a feedback loop, the DEM model fosters continual information to clients regarding the discrepancies between performance and standards. Provus was adamant that there could not be an evaluation without discrepancy information.

Moreover, the basic methodology of the DEM model -- to search out discrepancies -- is a fundamental principle or philosophy that must be followed in any school systems evaluation.

Weaknesses:

From a study of the DEM approach, Andres Steinmetz (1983) concluded that the Discrepancy Evaluation Model was not necessarily an educational evaluation model because it seemed more oriented to other concerns as consumer goods (e.g. motorcycles). He concluded that the model was parochial and profit/program oriented, not responsive to consumer needs, dichotomous in that evaluation and decision-making carry out independent functions, and antithetical in its extreme consumer orientation (Steinmetz,

1983). Provus was critical of the poor design work in evaluation and acknowledged that stakeholders must be involved in local system evaluation. Provus believed staff development fostered improvement and a more analytical approach to evaluation.

The major difficulty in the application of the model is the problem of specifying clear and pertinent standards, which are formulated and judged by the client(s), not the evaluator, in an implicit fashion. The difficulty in utilizing DEM rested on the specificity of standards and the acceptability of objectives -- both of which were defined as the responsibility of the clients. D. J. Cichon (1983) delved into this problem in his utilization-focused procedure for prioritizing questions in the Discrepancy Model. Cichon concluded that the procedures for generating questions relative to standards from DEM literature were problematic and led to unmanageable and inefficient evaluation.

The evaluator must be a planner, know management technique, undertake group leadership, and foster teamwork; yet, in reality, the evaluator and decision maker carry out independent functions. Following DEM guidelines, the evaluator must refrain from disrupting the program manager, yet s/he must consult with the decision maker throughout the development of a proper evaluation design for information to improve. When data generated are a product of team work, the process is generally accepted; however, when objectives are translated into behavioral or measurable terms (Campbell & Stanley, 1963), the model is viewed as threatening and potentially destructive.

The role relationship assumed by the evaluator and client is crucial to the success of the model. If roles are independent, a power struggle looms; if roles are collaborative, then the evaluation is viewed as unfair, subjective, or biased.

Summary of the DEM Evaluation Model:

Below are given, in summary form, the important aspects of Provus' DEM Model, a goal/objective based approach to evaluation.

1. **THEORIST:** Malcolm Provus (1971)

2. **DESCRIPTION:** An evaluation of discrepancies that occur between designated standards, specified objectives, and outcomes.
   Define standard, determine discrepancy (performance/ standard), judge, then, if necessary, alter!

3. **PURPOSE:** comparison between performance and standard to ascertain a discrepancy.

4. **APPLICATION:** daily monitoring for decision makers of goal achievement, student progress, and productivity.

5. **WEAKNESSESS:** problems of establishing standards & roles, profit oriented, no detailed processes.

6. **STRENGTHS:** fundamental principles, (e.g.,"feedback loop"), delineating discrepancies, improvement focused.

4.4

Theorist #3: Robert Stake
MODEL: Countenance-Responsive
CATEGORY: Judgemental Based
(A) Client Oriented

Description:

The third evaluation model of the five leading theorists being analyzed is the Responsive Model. Robert Stake's **Responsive Model** is an outgrowth of his earlier conceptual framework for evaluation, **the Countenance Model** [literally "the face of evaluation .... the whole picture" (Stake, 1967, pg. 523)]. The Countenance Model (Figure 4.3) distinguishes three phases of an educational program: **antecedents**, **transactions**, **outcomes**, and two competing countenances -- **description** and **judgement**. The 3 x 2 matrix produced by the Countenance Model, especially its "**transactions**" component, became the basis for the development of Stake's Responsive Model.

Figure 4.3: Countenance Model---a 3 x 2 Data Matrix Evaluation [*distinguishing between two competing matrices (countenances)*]

Three Phases of a Program:	3 X 2-	DESCRIPTION *of*		JUDGEMENT *by*
1. ANTECEDENTS		standards inputs intents	→	OBSERVATION of all variables affecting outcomes
2. TRANSACTIONS		activities processes	→	COMPARISON
3. OUTCOMES		inquiry	→	DECISION

Often called the "transaction" model, the Countenance approach concentrates on educational practices and processes within the school system, the judgements of which are weighed by an evaluator and his/her audiences. The data matrices (figure 4.2) describe and distinguish between the antecedents (inputs and conditions prior to the evaluation), transactions (activities and processes of the variables chosen to be considered in the evaluation), and the outcomes or ouputs where the goals and intents are judged by the standards that were determined at the outset, culminating with a description and interpretation of the particular program being evaluated.

Stake's (1967) evaluation plan is an informal framework by which he develops: (1) the fullness of descriptions for interrelationships, (2) the role of judgement, (3) the utilization of data matrices in order to evaluate and distinguish between antecedents, transactions, and outcomes, (4) the importance of goals, objectives and intents (all three of which he considers synonymous), (5) observational choices, (6) data processes to find the contingencies among the antecedents, transactions, and outcomes and the congruences between intents and observations, and (7) comparing and judging through absolute standards reflected by personal judgement and by relative standards reflected by alternative programs. Of all the various steps in the process, Stake (1981) emphasized the importance of data collection and the means by which the data were to be collected. The raw data exhibited by the naturalist evaluator (witnessing by observers who understand the reality of the classroom, words of people involved, etc.), portrays actual teaching and learning problems and provides readers with vicarious experiences which interact with existing naturalistic generalizations formed from previous experience.

Stake's countenance model is the primer of client-centered studies. It has since been incorporated in his "responsive evaluation" paradigm. Stake's Responsive Model (Table 4.2) incorporates the transactional elements of the above matrix (Figure 4.3), but underscores the outcome of evaluation as being the congruence of the judgement (response) of the evaluator and the stakeholder regarding all aspects of the evaluation.

Table 4.2: Stake's Responsive Model

E = R/J <> e/s

Evaluation (*E*) is the congruence (=) between the *RJ* (Response/ Judgement) of the *e* (the evaluator) and the *s* (the stakeholder) regarding the antecedents, transactions, and outcomes of the evaluation.

The process of responsive evaluation involves finding out what is valuable to an audience, planning for observations, gathering different viewpoints, checking quality and accuracy of portrayals, getting reaction to findings, communicating informally with all clients, and (by many people preparing narratives) writing the final repon -- all of which are invaluable contributions to any approach to school system evaluation.

The Responsive Model is the genesis of the stakeholder approach. By calling for continuous communication between evaluator and audience, it is a pluralistic, interactive, subjective and service-oriented approach to educational evaluation (Stufflebeam and Shenfield, 1985). In such a concept of evaluation, the evaluator must communicate results more naturally and effectively to acquire the response of the stakeholders. One persuasive theme of Stake's writing is that the evaluator must work with and

for the support of educators and the community, thereby serving a wide range of clients, each of whom have different priorities! As a result of the incorporation of both models, Stake's approach has been termed the Countenance-Responsive model.

Purpose:

The purpose of the **COUNTENANCE-RESPONSIVE MODEL** is to judge and determine the merit or worth of an educational program. Guba and Lincoln (1982) posit that the model is an evaluation format that "takes as its organizers the concerns and issues of stakeholding audiences" (p. 24). It is a model in which the evaluator is less concerned with objectives and more concerned with the effects on the stakeholders. "I believe", said Stake (1973), "that human observers are the best instruments we have for evaluation issues ... and that the importance of their information and its reliability will increase as the number and variety of observers increase" (p. 298).

Stake (1973) explains that "an educational evaluation is a responsive evaluation if it orients more directly to program activities than program intents... [if it] responds to audience requirements for information ... and [if it] reports the success or failure of a program to the different value perspectives of the clients" (pg. 282). Like Parlett and Hamilton (1972), developers of the "Illuminative Model" for evaluating educational programs, Stake's approach views programs as a whole, and concludes that all data such as educational setting, teaching transactions, judgemental data, holistic reporting, and information are the substantial elements that help educators. The Countenance-Responsive model, therefore, brings light to an evaluation

by "illuminating" the principles underlying the evaluation and the causes and effects within the operation.

Stake (1967) posited that "the countenance of evaluation should be one of data gathering that leads to decision-making' and contain all relative concerns regarding merit and worth (p. 539). Stake (1973) said: "I prefer to work with evaluation designs that perform a service. I expect the evaluation study to be useful to specific persons" (p. 292).

Application:

Guba and Lincoln (1982) conceived an evaluation model based on Stake's Countenance-Responsive evaluation, but using naturalistic methodologies. They conceptualized responsive evaluation as an inquiry into education through a paradigm shift from hard science with epistemological assumptions (based on logical positivism and radical relativism) to a study of the phenomenology of human behavior through ethnography, anthropology and sociology ....a naturalistic approach! Usually qualitative data collected through fieldwork, their naturalistic/qualitative evaluation is "a holistic, inductive, response-adaptive method for studying human social activities in their naturally occurring environment" (Door-Bremme,1985, p. 67). Like Stake and Eisner, they are concerned with description and interpretation, not measurement and prediction.

Keston and Burgess (1985) used some of the components of the Countenance-Responsive model to evaluate an addition to the University of Regina's distance educational system of live T.V. transmission. The evaluation findings included a description of the program, its antecedents, transactions, outcomes, and all aspects of the system as its technical and support

interactions. Yet the evaluation showed the limitations of the Countenance-Responsive model for evaluation in that the findings were limited solely to a stakeholder's approach of general comments, data forms, and collecting and assessing questionnaires and report forms more than to a judgement of the project.

A PMI (Planning, Monitoring and Implementation) Model was used in 1981 by the District of Columbia Public School System to evaluate the effectiveness of educational programs. The school system emphasized objective-referenced testing, performance-based teacher assessment, and administrative accountability. Such policies required goal attainment or objective based models. Russell (1981) reported, however, that the selecting of an evaluation program to determine the effectiveness in achieving such goals, posed a question of what model would be used to provide the basic strategies for PMI. Would the choice be CIPP? No, it served some purposes but not others. What of Provus' or Stake's approach? Both were considered as approaches to structure PMI. (One would think that with the emphasis on objective referenced measurement of program, Tyler's method would be used). The school district reasoned that the model needed was one that would not only take into account sub-goals and objectives, but also one that would provide information that could explain, describe, and judge goal accomplishment. They chose Stake's Countenance- Responsive Model. Why? Because its concern with various kinds of data offered a background to develop an evaluation plan. Again, it emphasizes description and judgement of what is intended and what occurs. Moreover, it satisfied the desire for more input by stakeholders.

Jonathan Z. Shapiro's (1985) critical appraisal of an evaluation

of two enriched worksite programs in health, science, and medicine (career awareness and biomedical studies respectfully) at the Medical Center of University of Illinois at Chicago, exemplifies the use of Stake's (1976) revised Countenance-Responsive model of contingency and congruence, dealing chiefly with his approach to intentional and unintentional goals. The approach details Stake's 3x2 data matrix of antecedents/ transactions/outcomes regarding intents/observations and their congruencies. The career awareness program (preparing academically talented but economically disadvantaged minority high school students to enter health science and medical programs), was expected (1) to increase aspiration for these careers and (2) to instill enjoyment in a work experience setting. What was intended, however, was not observed! The results revealed that neither objective was achieved because the evaluation processes were poorly articulated. Furthermore, since staff members had been excluded from the evaluation, there was a lack of communication. Although the students did acquire skills and an increased appreciation of responsibilities in the workplace, and although the model's conceptualization of antecedents and transactions was fairly explained, the outcomes of the study produced little congruence between what was intended and what was actually achieved.

Strengths:

In the literature pertaining to responsive evaluation, Stake claims that his model allows questions to emerge and be identified, that immediate adjustments are possible as data are made available, and that constant feedback between evaluator and stakeholders, facilitates the acceptance of the results and creates an atmosphere of cooperation. As a result, the model

is flexible/changeable on the basis of incoming information (Hurteau and Nadeau, 1985). There is an almost immediate adjustment when the information is gathered. Stake (1967) insisted that to maintain standards, evaluators must ensure that all relative concerns of merit and worth are included in the evaluation. " It is the business of the evaluator, not merely to accumulate data, but to judge" (Stake 1967a, p. 527, Stenhouse, 1976).

One major advantage of countenance-responsive evaluation is the constant feedback between the evaluator and the stakeholder -- a quality that facilitates the acceptance of results and creates an atmosphere of co-operation and sympathy towards the evaluation process and between the evaluator and the stakeholders. The model is premised on people implementing and conducting their own evaluation which may allow for credibility and rapid comprehension among the stakeholders.

The model is responsive to the needs of the audience and allows questions to emerge, to be identified, and to present a finding to the client. Stake (1972), insisting that evaluation rely on the process of observation, judgement, and response by a platoon of students, teachers, community leaders, and specialists, said. "I have argued that students, teachers, and other selected observers exercise the most relevant critical judgements [for] the alleviation of instructional problems [are] most likely accomplished by the people most directly experiencing the problem" (p. 298).

Weaknesses:

In reality, however, the model is often plagued by resistance and opposition to data collection. The pluralistic inertia of soliciting judgements of various people involved in negotiating, interviewing, and responding may

come close to democratic practices but it often climaxes in confrontation with an evaluator who, while responding to legitimate interests and pressures, may or may not be obligated to any one point of view (Stake, 1975). The probability of the Countenance-Responsive evaluation model leading to internal strife and possible value conflicts, renders the model inadequate as a formal approach. Because the model is so broad, flexible,and general, its open-endedness can be harmful if left unwieldy, uncontrolled. overly subjective, and political! Stake (1981) admits that his responsive evaluation paradigm is more political than methodological in commitment, and that, as such, it may account for countless adjustments, strife, provocation, alienation, inertia, value conflicts and slow progress. This pluralistic viewpoint, allowing for the preoccupations, questions, and problems encountered by different audiences concerned with the program being evaluated, may reduce the evaluator to a participant. It almost seems that Stake (1975) connotes that evaluators should pander to the desire of clients.

The evaluator often does become the participant. The model relies heavily upon the response of stakeholders who, in all their efforts to help, may either slow down the process or provoke the administration (Sherman & Lincoln, 1982). Because of the alienation that often results during the evaluation, theorists warn that constant feedback, essential in any approach, is vital because of the sudden changes that may occur (Stufflebeam & Shinfield, 1985).

Because of its reliance on individual observation and individual stakeholder interacting, the countenance-responsive model is too subjective in its perception. Stake (1981) viewed his model, not as naturalistic, but more political in that it involved stakeholders who have important concerns

regarding the program. As a result, the audience may control the format of the reports and the process become unwieldly (Popham, 19984). Moreover, the model can be plagued by resistance and opposition to the data and to periodic adjustments. The input by the stakeholders can also be a deterrent in that they want to do all things (even making out a questionairre when their expertise is nil (Burleau and Nadeau, 1984). These interferences often slows down the process and provokes alienation that leads to intense strife and value conflicts. Such participation also leads to oversimplification of the process and the outcomes and, as a result, may be disappointing.

Stake's Countenance-Responsive Model requires time to construct evaluation instruments and to analyze materials. The methodological problems also involve assigning relative weights to outcomes, distinguishing overlapping concepts, and assuring validity. It is costly -- especially if case studies or a naturalistic approach is used. On the average, the cost varies from six hundred dollars to six thousand dollars for one program assessment (Shapiro, 1978) or ten times as much as a formal model (Hurteau and Nadeau, 1985).

Summary of the Countenance-Responsive Model:

Below are given, in summary form, the important aspects of Stake's Countenance-Responsive Model, a judgemental (Client-based) approach to evaluation.

1. **THEORIST:** Robert Stake (1967)

2. **DESCRIPTION:** Antecedents -- Transactions -- Outcomes (feedback and dissemination through case studies,

interviews, and observations).

3. PURPOSE: To involve the views of stakeholders (the ones affected and effected by evaluation) in a judgement of the merit and worth of a program as well as encouraging and increasing a wider use of results for information and decision-making.

5. APPLICATION: assessment of educational programs or projects by stakeholders ... everyone with an interest!

6. DYSFUNCTIONS: antagonizes powerful people, protects clients interests, political, unwieldly, biased.

4.5

Theorist #4: Michael Scriven
MODEL: Goal Free Evaluation [GFE]
CATEGORY : Judgemental Based
(B) Consumer Oriented

Description:

The fourth evaluation model to be analyzed is Michael Scriven's (1973) **Goal-Free Evaluation Model** (GFE). Scriven's model is easily categorized. It is consumer based and judgemental. The **GFE** model is based on the premise that, while goals are necessary for effective planning and implementation, they are not necessary for evaluation. Tawney (1976) quoted Scriven as saying: " I began to work on an alternative approach ... simply, the evaluation of actual effects against a profile of demonstrated needs in the region of education. I call this 'Goal-Free Evaluation'" (p. 36). Scriven (1978) asserted that the most practical argument for his goal-free evaluation theory is that goals "from staff (are) often a mess -- usually slogans and not real, implicit goals, but the idealistic and explicit goals of others ... they are the worst part of the problem of evaluation ....are unnecessary and should be avoided" (p. 325). Scriven (1974) said that the object of evaluation was to test achievement, not goals.

Scriven (1971) acknowledged goals as "necessary for effective planning and implementation, (but)not necessary for evaluation" (p. 327). He insisted that goals contaminated evaluations and increased the chances of missing the most important and active effects. Scriven (1981) saw evaluation as an investigation of merit and of casual (latent and covert) effects that influence judgement.

Scriven (1976) believed that all useful evaluation must be

comparative, that evaluation must be a determination of merit and worth, and that there could be no evaluation without a judgement. That judgment, Scriven (1967) asserted, must be given by the evaluator -- he/she must arrive at a defensible valued judgement! In his other model, the Consumer-Oriented Evaluation Model (Table 4.3), he had stipulated comparison and judgment as the two main tasks of evaluation (Scriven, 1967,1983). Inherent in this model is the importance of comparison in effects, in benefits, and in cost. Scriven's approach has been likened to Consumer Reports because of the finality of a judgement of merit leading to choice and utility.

Table 4.3 SCRIVEN: **Consumer-Oriented Model**

1. Establish **STANDARDS**
   (variables, indicators, needs, etc.)

2. Make **COMPARISONS**
   (of effects, costs, benefits, etc.)

3. Make **JUDGMENTS**
   (for choice, utility, change, etc.)

The GFE was also designed primarily for the evaluation of consumer goods. Associated with consumer reports (e.g., good-better-best), the GFE is simply a product oriented profile that is basically concerned with cost effectiveness, needs assessment, checklist practices, and relentless comparisons.

Purpose:

Scriven advocated goal-free evaluation because he was aware of goal biases --- the perception of an evaluator causing to uncover the expected and overlook the unexpected. (Tuckman, 1979). Scriven (1973) posited that "the

job of evaluation is to find out about effects (the situation) and to assess them" (p. 320). The evaluator must look for effects he did not expect and evaluate these side effects to ascertain whether they aregood or bad. S/he is there to assess the actual effects and their merit or worth for, as Scriven (1973) asserted, "It's neither possible nor proper for an evaluator to get by without assessing the merits of what has been done' (p. 321) Scriven's answer to any criticism is that there is only one purpose for evaluation: the judgment of merit and worth of some object.

Application:

Murray and Smith (1979), in their research on teacher training processes and perceived events, wanted an understanding of the underlying causal mechanisms influencing the program. They adopted Scriven's GFE since it so effectively bypassed the intentions of developers and analyzed all the possible outcomes.

When a case study review (1976-80) of a large Mexican American cooperative farm in Salinas Valley, California, proved that on the basis of the traditional judgement of program outputs (profit) and program goals (self-sufficiency), the project was a failure, GFE strategies were introduced to render a broader perspective of the outcomes. Included in the qualitative measures were the sensitivity of unintended and unanticipated consequences (e.g., stability of residences), along with a collaborative approach of various perspectives. By using Scriven's approach, the project was rendered a success (Wells, 1982).

In an effort to answer questions regarding the merit, worth, and value of programs and projects rather than their size, weight, or number,

Scriven, himself, applied his GFE evaluation model to evaluating educational programs. For example, in evaluating what materials were to be used in teaching reading, Scriven (1978) indicated, through a thirteen step method (scale items as need, cost effectiveness, standards, etc.), that parents wanted consumer reports on curriculum materials. Scriven (1973) said that taxpayers do not need to know about goals, or structure, or technical data ... just whether or not "the money was wasted or well spent" (p. 321).

Strengths:

GFE (Goal Free Evaluation) differs from GBE (Goal Based Evaluation) in that it gathers information about all effects which are seen as worthy of attention. Furthermore, GFE determines the relative importance of various effects without bias being introduced of what are or were the intended and unintended effects. The over-riding concern is the control of bias ... to the point that the evaluator is not informed of the program developers and the pre-specified intents. Hence, s/he searches for all outcomes. The impartial evaluator, Scriven explains, does more good by observing the unexpected than intended effects. The gathering of information, holistically and inductively, about all worthy effects and the determination of the relative importance of these various effects in comparison to what was intended are two distinct advantages that GFE has over GBE (Harlen, 1976).

Scriven is critical of evaluation ideologies that focus on achieving objectives as opposed to meeting the needs of the consumer. He insists that evaluation must arrive at defensible valued judgements, rather than simply measuring whether or not goals are achieved. Aside from the usual appraisal of goals or objectives, Scriven (1967) challenged evaluators

to look broadly for different and additional kinds of outcome data. Such an approach to Scriven was less intrusive and more adaptable, better at finding out side effects, more professional, more challenging, and less prone to social bias (Worthen & Saunders, 1973); Stenhouse, 1976). The strength of the GFE lies in the fact that such an evaluation approach is complementary and reversible in that one can start out with the GFE and search for all effects and then shift to GBE to ensure that the goals were attained. Even though the goal-free technique encourages the evaluator to be attentive to a wide range of outcomes, Popham (1975) stressed that a well-designed evaluation would use both goal based and goal free methods.

Scriven's methods contribute one of the most current approaches to educational evaluation with two distinct roles of evaluation: **formative** (to improve or refine) and **summative** (to judge). Formative evaluation is an assessment of worth in order to render something better; summative evaluation is a determination of merit in order to make a decision to change, retain, or terminate (Lincoln and Guba, 1980). Goal-free evaluation can be formative, not in the sense of advising, assisting or improving, but in developing controls and previewing what a summative evaluation would entail without getting involved in that process. In formative evaluation, evaluation exercises serve as "feedback and guide" to influence shaping through successive revisions.

Scriven wanted results, not rhetoric, by insisting that data be gathered without restraint by goals (Patton, 1980). Stake (1971) claimed that Scriven was advocating that, in evaluation, "blind is beautiful" (p. 322). To Stake (1973) what is intended, is not important. While one may argue that you can't do an evaluation without knowing what it is you're supposed to evaluate.

Scriven argues that you do not need or want to know what it's supposed to do. Ironically, regardless of what any evaluator and his/her audience are to measure, that "what" still tends to become the goals of the system.

Weaknesses:

According to Rossi (1979), the GFE model is based on the assumption that "the vagueness of goals and their internal contradictions .... plague the attempts to evaluate" (p.38). The GFE model is built on the assumption of bias control with no co-option, logical analysis, and a Modus Operandi, which advocates concentrating on the causal (latent and covert) effects that influence patterns and results. However, these criteria of so many outcome variables and overlapping concepts (a judgement usually ranked good, better and best .... a' la Consumer Reports) make the approach complex, irrelevant and questionable for educational evaluators. They are simply product-oriented evaluations concerned with cost-effectiveness, needs assessment, checklist practices, and relentless comparisons for judgmental purposes. In fact, Scriven was paranoid that there was only one purpose for evaluation; that is, judgement, and he based that judgement on utility and ignored feasibility. By being an educational judgement based on producers' and consumers' interest in social utility and being divorced completely from any participation by educators, Scriven's evaluation models are one-dimensional only. Being consumer oriented, the GFE is often so far removed from and independent of educators that it may not assist them. Sexton Markland (in Stake, 1973) called the GFE "aimless evaluation" (p. 240).

The major debate resulting from Scriven's GFE model centers around goals. The model, by ignoring goal attainment and assessment, has

been judged as poorly planned, impractical and unrealistic. Scriven asserts that one should not focus on goals because pluralism makes goals less relevant to political realities. As a result, a major defense for the GFE model is its modernistic approach to a pluralistic society. And while one must acknowledge that in a pluralistic society, there are different goals for different people, yet what the evaluator and his associates do decide to measure often tend to become the goals of the program.

Alexander and Farrell (1981) state that GFE reflects an epistemological view which many do not accept because no one can determine whether a program, policy, or product is meeting its objectives if one cannot specify what those objectives are. Scriven charged that the usual testing approaches were too narrow to serve as an adequate basis for judging, and he ignored many of the variables that were important in educational assessment. Popham (1974, 1975) and Alkin, Daillak and White (1979) purport that, unlike his original statement of purposes, Scriven conceded that GFE is a supplementary approach only to goal based evaluation; that is, as another strategy to be used in conjunction with other criteria.

Summary of the GFE Model:

Below are summarized the important aspects of Scriven's Goal Free Evaluation Model (GFE), a judgemental, client-based, and consumer-oriented approach to evaluation

1. **THEORIST:** Michael Scriven

2. **DESCRIPTION:** GOAL-FREE EVALUATION
goals unnecessary for planning, implementation,

and evaluation; UNINTENDED EFFECTS ARE!

3. **PURPOSE:**	A determination of merit and worth ... of judgment, and social utility for consumer reports FORMATIVE (to improve) & SUMMATIVE (to judge)
4. **APPLICATION:**	product and project testing, consumer reports (cost effectiveness, benefits, comparisons, etc.)
5. **STRENGTHS:**	comparison & judgement (in benefits and costs) for consumers
6. **WEAKNESSES:**	too pragmatic, supplemental, invalid, biased, product oriented.

4.6

Theorist #5: Elliot Eisner
MODEL: Educational Connoisseurship & Criticism
CATEGORY : Judgemental Based
(B) Professionally Oriented

Description:

The fifth and last evaluation model of the five theorists to be analyzed is Elliot W. Eisner's **EDUCATIONAL CONNOISSEURSHIP AND CRITICISM MODEL**, a judgemental model utilizing people as a measuring instrument. The approach is a concept of two roles of an evaluator: (1) as a connoisseur [employing the "art of appreciating what is educationally significant" {Eisner, 1979, p. x)] and (2) as a critic [using the art of disclosing educational criticism (Eisner, 1975, 1985)]. The educational critic relies on his perceptive skills, honed by knowledge and experience. His methods consist of the three interrelated components of **description, interpretation and evaluation (DIE)** (Figure 4.4) .

Figure 4.4: The Education Connoisseurship and Criticism Model

DIE: A Naturalistic Approach using 3 Interrelated Components

PROCESS:	EVALUATOR:
D escription (an attempt to identify, characterize, and portray in understandable language the relevant qualities of educational life)	as the (1) connoisseur (appreciating) as the (2) critic (disclosing)
I nterpretation (deciphering the meaning and reasoning of situations)	PURPOSE: *to improve program and instruction*
E valuation (improving educational processes)	

The **descriptive** component identifies and describes the particular characteristics of a program, teaching experience, or student/teacher relationships: the **interpretative** element analyzes the data collected, and the **evaluative** segment records and summarizes to give findings and recommendations for improvement and/or change. All three aspects are achieved with the naturalistic approach more suitable to artistic phenomena than to any rational application. All data are analyzed, processed, and interpreted through the merits of an evaluating judge, a connoisseur/critic (Guba and Lincoln, 1982). Eisner uses the word "connoisseurship" because it is relevant to the arts and emphasizes the artistic aspects of educational thought and action. He uses the word "criticism" because when one writes educational criticism of a school system, one describes, one interprets, and one evaluates what one has seen (Eisner, 1976).

Purpose:

Rather than traditional scientific and technological persuasions, Eisner's model uses concepts embedded in art. Eisner's intent is to use artistic and aesthetic forms for dealing with the problems of designing and evaluating educational programs. His major thesis is that the artistic forms used in approaches to educational evaluation, especially to assess effectiveness, have a set of profound consequences on the conduct and character of schooling; specifically, curriculum and teaching (Eisner, 1985). Based upon his interest in the subject of art forms, Eisner proposes that these forms should be expanded in order to attend to the varied qualities of educational life relevant to the arts (Eisner, 1975, 1976).

Eisner's model focuses on two important aspects of the

educational system -- program and instruction -- in the hope that improvement will come from a critical thinking approach of enabling teachers to see and think about what they do (Eisner, 1979). To Eisner something more was needed -- an alternative whereby theory might function in educational evaluation by cultivating educational connoiseurship through a critic who appreciates what s/he encounters, is aware of art forms, and understands what s/he sees and hears.

Applications:

In 1986, eighty-two percent of all U. S. colleges and universities, faced with maintaining quality during declining budgets, conducted program reviews to improve credibility and provide accountability (Brier, 1987). One institution selected the connoisseurship model and retained an expert who was free to have evaluation proceed along whatever criteria he deemed appropriate and to judge the outcome based solely on his own personal experiences.

Slotnick (1984) used Eisner's model when reporting on a Fargo (North Dakota) study group of seven physicians interested in improving their instructional capabilities. The group succeeded in developing educational connoisseurship among its members through cohesiveness, addressing important issues, active involvement, and by structuring each session so that specific, tangible and useful evidence emerged. By using artistic forms of reflection and understanding, the project underscored the ways by which instructors conceptualized educational programs and interpreted data. The connoisseurship and criticism approach was seen as an effective contemporary artistic approach for the evaluation of educational programs by conceptualizing the whole and then working on the differential parts and

and problems (Eisner, 1979).

Strengths:

Eisner's Educational Connoisseurship and Criticism Model is a new way of looking at phenomena that constitutes the realities of classroom life through the instructional role and the use of curriculum materials. It is, however, as Eisner (1986) himself acknowledged, "only a small portion of the possibilities in the conduct of educational assessment" (p. 150). Eisner's belief is that the enhancement of the artistry of teaching can illuminate an appreciation (connoisseurship) and a disclosure (criticism) of teacher performance, classroom qualities, and student-teacher relationships.

To Eisner, the idea of starting with aims and objectives and then deductively proceeding to evaluation does not fit with reality and experience. What is necessary, from Eisner's (1975) point of view, is the practical judgement and insight into curriculum which requires an artistic sense of taste, design, and fitness by describing, interpreting, and evaluating.

Eisner (1979) sees art as a fertile source for creativity. Rather than complain about the art of teaching, Eisner believes that we should try to foster improvement in classroom instruction by inculcating new approaches to educational evaluation. To this end, Eisner was among the first evaluator to advocate the use of videotapes, films, and meaningful written criticism to evaluate teaching and to educate professional clients. The improvement of education will come from enabling teachers to see and think about what they do (Eisner, 1985).

In lieu of the traditional and scientific approaches, concepts, and assumptions which lack any aesthetic theory embedded in art, Eisner (1979)

advocates that artistic forms should be used for understanding and reflection and for dealing with the problems of describing, interpreting, and evaluating programs. Such artistic forms included the emotionalization of language when reporting on teacher and student practices, not the practice of most evaluators which was to talk of children as subjects and be preoccupied with goals.

Eisner was very critical of the scientific approach to educational evaluation. He viewed social science attempts to be value neutral, incompassionate, and scientifically objective as being inadequate. He attacked three metaphors: industrial (scientific management), behaviouristic (behaviour psychology), and biological (developmental theories) (Guba and Lincoln, 1982). To Eisner, no approach was value neutral.

Eisner's model is aesthetic in lieu of positivism and scientific technology. He criticized the scientific discovery methods and the scientific instrumentalization and procedures that treated educational practices and objectives not as ideographic, descriptive and with individuality, but as nomothetic, quantitative, and predictive. "The present", said Eisner (1976), "is sacrificed on the altar of tomorrow" (p. 337).

Weaknesses:

The Educational Connoisseurship and Criticism model is assessed by critics as being an appraisal relying solely on one individual's (the connoisseur/critic evaluator/expert) appreciation and evaluation of what is educationally significant (Eisner, 1979). It has validity only for experts as they are the sole evaluators of the important aspects of any program (House, 1980). The tendency, therefore, for bias and subjectivity is obvious; in fact, in relying on an

expert, the model's success in application depends on how well the expert can intuitively balance the principle of judgement over eccentric observations (House 1978, 1982).

An analysis of Eisner's (1979) approach indicates that his graduate students (evaluators), potential connoisseurs and critics spent most of their study and practicum hours on learning critical writing skills -- exercises to create critically expressive language that artistically transformed the character of the forms perceived in a classroom to the reader as a visceral understanding or experience. This vicarious epistemology abounds in metaphor, analogy, poetic sensitivities, and descriptive assertions. Eisner (1979) himself admitted that the resulting use of artistically expressive language rather than flat reporting of bottom-line, conclusive summaries created a tendency to produce bias descriptions.

Eisner and his students literally paint an evaluative landscape of the activities of teacher and children in a school classroom, as exemplified in the following examples of educational connoisseur and critic trainee's description and interpretation of teacher and classroom:

> *" This classroom is almost a caricature of society. The curriculum is served up like Big Macs. Reading , math, language, even physical and affective education are all precooked, prepackaged, artificially flavored. 174 pieces of carbon paper...."* ***or***
>
> *"These students , many of whom are the children of poverty and ethnic minorities, should make their way nicely in the worlds of golden arches, Mr. Coffee, foot deodorants, padded bras, and electric toothbrushes."* ***or***
>
> *"The teacher is kind, mechanical, rewarding, never smiles, victimized by central office, obsessed with standardized tests, who (quoting Amitai Etizoni, and Charles Silverman's Crises in Education), prepares a frustrated and disillusioned generation*

> *of students....indifferent cogs for an industrial-bureaucratic machine....despite all the constraints society imposes upon her as budget, class size, and lack of preparation time".*
> *[Eisner, 1979, p.231].*

The model is very prone to relating anecdotes regarding the personal life of students and teachers. Eisner posits that the model seems more like a soapbox for supposedly educational ills. And, although the strength of the model lies in its criticism, that criticism can, as illustrated, border at times on the mundane and thefacetious. Witness, for example, the following critical retort: "Students do little else (in school) but sit by themselves, filling in blanks, copying sentences, and doing row upon row of math problems" (p. 231).

Unfortunately, there is no "bottom line" in the artistic and descriptively rendered criticism. Tension often exists when using artistic language to describe an object or person because the use of such language often leads the reader to conclude that the description is biased. Some clients favor less expressive language because it appears to be more truthful.

The model is also time consuming (in that it requires a great deal of time in classrooms), costly to observe and analyze (reporting classroom activities of every teacher in the school system), and requires great skill in an evaluator (one at the level of a connoisseur and possessing critical writing skills) if the evaluation is to be done well.

Summary of the Educational Connoisseurship and Criticism model:

Below are given, in summary form, the important aspects of Eisner's Connoisseurship and Criticism Model, a judgemental and professionally

based approach to evaluation.

1. **THEORIST:**	Elliot Eisner
2. **DESCRIPTION:**	CRITIC (ART OF DISCLOSURE) CONNOISSEURSHIP (ART OF APPRECIATION) through artistic criticism and standards, DIE: Description, Interpretation, & Evaluation.
3. **PURPOSE:**	Improving program and curriculum materials, looking at classroom realities & teaching role
4. **APPLICATION:**	program, teaching, and student outcomes; for consumers and connoisseurs.
5. **STRENGTHS:**	critical review, perceptive skill of critic as a trained evaluator, uses model concepts embedded in art.
6. **WEAKNESSES:**	biased,subjective,costly, time consuming, critical appraisal only!

Summary:

This chapter has outlined the models of five leading theorists through a construct that has included descriptions, purposes, applications, strengths, and weaknesses of each model. Inherent in this framework has been the realization of the usability of these models for purposeful educational evaluation of programs and/or projects and, in some cases and some circumstances, for the evaluation of school systems.

The five theorists' models that have been analyzed in this chapter were designed to discern any outcomes (CIPP/Stufflebeam), discrepancies (DEM/Provus), contingencies/ congruences (Responsive-Countenance/Stake; GFE/Scriven), or interpretations (Educational Connoisseurship and Criticism/Eisner) in the evaluation of projects and

programs. When such variant terminology is used, it is very difficult to ascertain which of the five models is actually being applied; for example, the congruence analyses of Stake are the discrepancies of Provus or the intended/goal base and unintended/goal free comparisons of Scriven.

Having detailed the salient aspects and pertinent characteristics of each of the five models in this chapter, the argument arises as to what is missing in the five models to give rise to another approach to school systems evaluation. In other words, is there a mis-match? Are the models of the five leading theorists inappropriate? inadequate? To answer those questions, a detailed comparison is drawn between each of the components of the new approach and the models of the five leading theorists in Chapter VII.

[*The data results from the review of the literature relative to educational evaluation studies, theories, and models follow on the next page]*

DATA ANALYSIS/RESULTS FROM THE REVIEW OF THE LITERATURE [1 OF 4]

1: *Analysis of Literature Review of Education Evaluation & Evaluation Model:*

LEGEND: (1) GLS [GOALS]; (2) ENV [ENVIRONMENT]; (3) LEA [LEADERSHIP]; (4) STR [STRUCTURE]; (5) W.F. [WORK FORCE]; (6) INT [INTERACTION]; (7) PRO [PROCESS]; (8) DM [DECISION-MAKING]; (9) W.P. [WORK PLACE]; (10) CUL [CULTURE]; (11) CHA [CHANGE]; (12) COM [COMMUNICATION]; (13) CUR [CURRICULUM]; (14) ACC [ACCOUNTABILITY]; (15) POL [POLITICS]

	1 GLS	2 ENV	3 LEA	4 STR	5 W.F	6 INT	7 PRO	8 DM	9 W.P	10 CUL	11 CHA	12 COM	13 CUR	14 ACC	15 POL
Alexander & Farrell (1981)	X						X								
Alkin (1972).							X	X							
Alkin et al.(1979)	X					X							X		
Ambry (1979)						X									
Anderson et al (1975)				X				X						X	
Apple et al (1974)				X			X			X	X				
Baskerville et al. (1979)	X	X	X	X	X	X									
Benedict (1973)	X					X					X				
Berens (1986)							X							X	
Blasche (1972)	X														
Boruch & Cordray (1980)	X					X									
Broadfoot (1979)														X	
Berk (1981)	X		X							X					X
Barnes & Ginsberg (1971)						X									
Burteau & Nadeau (1984)						X									
Cichon (1983)															X
Common (1987)						X						X			
Cohen (1973)								X							
Conley (1987)								X						X	
Cooley & Lohnes(1976)	X	X	X	X		X				X	X				
Cooper (1976)								X							
Cronbach (1980)										X					
Cronbach & Associates (1981)	X							X					X		
Dilling (1986)		X			X									X	
Doer-Bremme (1985)						X	X								
Dressel (1976)	X	X										X			
Dyer (1971)	X		X	X											
Eisner (1976)											X			X	
Eisner (1979)									X	X	X	X	X	X	
Eisner (1985)		X			X				X						
Glasser (1977)	X						X								
Gooler (1973)													X		
	1 GLS	2 ENV	3 LEA	4 STR	5 W.F	6 INT	7 PRO	8 DM	9 W.P	10 CUL	11 CHA	12 COM	13 CUR	14 ACC	15 POL

Analysis of Literature Review of Evaluation Literature & Evaluation Models (Cont'd):

	1 GLS	2 ENV	3 LEA	4 STR	5 W.F	6 INT	7 PRO	8 DM	9 W.P	10 CUL	11 CHA	12 COM	13 CUR	14 ACC	15 POL
Gavelin & Ryan (1979)							X								
Guba & Lincoln (1980)							X								
Guba (1981)								X							
Guba & Lincoln (1982)								X							
Hamilton et al (1978)							X								
Hansen & Nafziger (1982)			X	X	X										
Harlen (1976								X						X	
Hathaway (1986)		X	X										X		
Hemini (1986)		X	X	X						X					
Herman (1989)		X				X									
Hinley (1979)									X			X			
Hoke (1973)												X			
House (1973)							X								X
House (1974)			X												X
House (1986b)															X
Hurteau & Nadeau (1985)									X			X			
Ingram & Miklos (1980)		X					X		X						
Ingram & Mills (1980)								X							
Jenkins (1976)								X							
Jesse & Cooper (1987)		X	X			X							X		
Jones (1979)	X						X								
Johnston (1978)								X							
Johnston (1981)	X									X					
Lawrence & Cook (1981)								X							
Leithwood et al (1981)								X							
Lessinger (1970)														X	
Levy & Nevo (1981)				X			X								
Lincoln & Guba (1980)							X								
MacDonald (1976)							X								
MacNeil (1986)			X	X						X			X		X
MacLean (1985)					X		X		X						
Madey (1982)	X														
Madaus (1983)															X
Madaus et al (1983)				X											
	1 GLS	2 ENV	3 LEA	4 STR	5 W.F	6 INT	7 PRO	8 DM	9 W.P	10 CUL	11 CHA	12 COM	13 CUR	14 ACC	15 POL

Analysis of Literature Review of Evaluation Literature & Evaluation Models (Cont'd)

	1 GLS	2 ENV	3 LEA	4 STR	5 W F	6 INT	7 PRO	8 DM	9 W P	10 CUL	11 CHA	12 COM	13 CUR	14 ACC	15 POL
Meyers (1981)	X						X								
National Study of Sch Ed (1970-81)	X		X	X	X										
Nevo (1983)	X			X											
Noblit & Eaker (1988)						X									X
Partlett & Hamilton (1972)					X		X		X				X		
Partlett & Hamilton (1976)							X								
Patton (1981)								X							
Patton (1985)											X		X		
Pincus (1974)		X		X							X				
Popham (1974)	X							X							
Popham (1975)		X				X		X					X		
Provus (1971)	X						X								
Provus (1972)							X								
Rosenshine & McGaw (1972)				X											X
Russell (1981)	X		X												
Rutman (1980)								X							
Ryan (1979)		X	X	X	X	X									
Schermerhorn & Williams (1979)												X			
Scriven (1973)		X						X							
Scriven (1974)								X							X
Scriven (1981)		X	X	X	X							X			
Shipman (1979)	X	X	X		X										
Smith & Lewis (1985)			X							X					
Stanley (1988)							X								
Stake (1973)		X													
Stake (1983)					X										
Stake (1986)					X										
Steadman (1976)									X						
Stenhouse (1976)								X							X
Straugham & Wrigley (1980)			X						X						
Stufflebeam (1970)							X								
Stufflebeam et al (1971)	X	X						X							
Stufflebeam (1981)							X	X							
Stufflebeam et al (1985)							X						X		
Stufflebeam & Shenfield (1985)	X						X								
Stufflebeam & Welch (1986)							X								
	1 GLS	2 ENV	3 LEA	4 STR	5 W F	6 INT	7 PRO	8 DM	9 W P	10 CUL	11 CHA	12 COM	13 CUR	14 ACC	15 POL

Analysis of Literature Review of Evaluation Literature & Evaluation Models (Cont'd)

	1 GLS	2 ENV	3 LEA	4 STR	5 W.F	6 INT	7 PRO	8 DM	9 W.P	10 CUL	11 CHA	12 COM	13 CUR	14 ACC	15 POL
Tawney (1976)								X						X	
Thompson (1982)							X								
Tuckman (1979)		X		X	X				X						
Tyler (1974)	X			X									X		
Tyler & Wolf (1974)	X														
Walberg (1974)											X				
Webster (1986)								X							
Weiss (1972)								X							
Weiss (1982)		X			X		X								
Weiss (1983)					X									X	
Weiss (1986)					X										
Wells (1982)							X								
Wentling (1980)											X			X	
Wentling (1982)													X		
Wholey (1979)	X					X									
Wholey (1983)						X								X	
Wiles & Bondis (1983)													X		
Windel (1979)						X									
Wolf (1984)								X							
Wolf (1987)	X										X			X	
Worthen & Sanders (1973)														X	
	1 GLS	2 ENV	3 LEA	4 STR	5 W.F	6 INT	7 PRO	8 DM	9 W.P	10 CUL	11 CHA	12 COM	13 CUR	14 ACC	15 POL
SUB-TOTAL ('70'S) (59)	17	11	7	11	6	10	13	15	4	3	7	5	6	10	4
SUB-TOTAL ('80'S) (65)	11	9	10	7	11	8	16	11	5	7	3	3	9	7	5
TOTALS: (124)	28	20	17	18	17	18	29	26	9	10	10	8	15	17	9

CHAPTER V

REVIEW AND ANALYSIS OF SCHOOL SYSTEM LITERATURE

Introduction:

Using the same methodology as was undertaken with a review of the literature pertaining to evaluation (Chapter 3) and evaluation models (Chapter 4), a review of the literature pertaining to school systems was undertaken to explain the significance of various definitions, classifications, components, and comparisons of school systems, when applied to an evaluation. To this end and from the analyses and review of the literature pertaining to social and public school systems, explanation is given in this chapter of (**a**) how school systems are defined, (**b**) the various theoretical and practical classifications of school systems, (**c**) research-based components of school systems, and (**d**) how the systemic components relate in a theoretical and practical application, when compared to school systems in their social and public systems contexts. As in the previous two chapters, the data results of the review of the literature relative to school systems follows the summary of the chapter.

5.1

SCHOOL SYSTEMS DEFINED

As a Social System

What is a school system and what are its components? First, the classic definition of a school system as a social system is that **it is an interactive, interrelated and interdependent network of components and unique organizational properties that form an organized whole and function to serve common goals** (Hall & Fagan, 1956; Thompson,

1967; Popper, 1978; Bacharach & Mitchell, 1987; Hoy & Miskell, 1991).

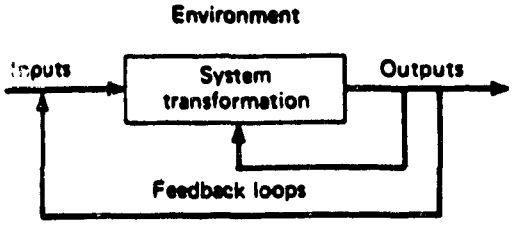
This social interconnection of system components and organizational features, including a myriad of operational sub-units and their specific qualities, characterizes school systems where institutions and individuals are bound together in interdependent relationships. A school system is therefore a good example of a social system. **A school system, like a social system, has distinctively defined components.** As underscored by many writers, (Aldrich, 1979; Chodak, 1973; Getzels & Guba, 1957; Hayman, 1974); Reason, 1980; Ryan, 1975; Silver, 1983), these components include: **(1) a clearly defined population, (2) a complex network of social relationships, (3) a unique culture, (4) an environmental boundary, and (5) a stable pattern of sub-units or sub-systems.**

As a Basic Open System

Secondly , many system theorists tersely define school systems **as composites of three major components: input, process and output** (Heaton, 1977) ... three very basic and distinct classifications of a "systems approach" (Figure 5.1). These classifications have been translated by researchers into many variants that, while appearing innovative, are simply synonyms of the same definition. For example, Frederiksen (198') may speak of entrances (inputs), Ingram & Mills (1980) of exchange transactions (processes), and Bacharach & Mitchell (1987) of outcomes (outputs). Regardless, school systems are, as Nadler (1987) states, complex systems that "take inputs from the larger environment and subject (them) to various transformational processes, which result in outputs" (p. 359). To illustrate in a

school district, inputs would be any system acquisition (human or financial resources), processes would represent any system practices from instruction to structure, and outputs would equate to student achievement or societal satisfaction. A simplified but meaningful question in today's pressure for school system accountability and evaluation, as delineated by Alkin (1972), is "To what extent does a given dollar (input), utilized in an alternate manner (process), increase the nature of the educational outcome (output)?" (p. 144).

Figure 5.1: BASIC OPEN SYSTEMS MODEL



SOURCE W K HOY and C G MISKEL (1991), *Educational Administration* (New York McGRAW-HILL, INC , p 21]

As a Public School System

Thirdly, school systems, as in public school systems or public school districts, have been defined to cover those **policies, programs and institutions (as well as the effect of these), which relate to the overall provision of both formal and informal education within a country, state or province** (Johnstone, 1978).

All three definitions are appropriate, depending upon the sense of context in which the words school system are used; that is, in a social or public school system context.

In this Study

In this study, a school system will be defined eclectically from the various definitions given above, that is , as an **open system, comprising distinctive interactive social units or components that, while 0nourished by and dependent upon their environment, form an organized whole and a network to serve a common purpose** (Walker, 1961; Burnham,1970; Krapel & Gasparotto, 1982; Hathway, 1986; Herman, 1989)]. Ingram and Mills (1980) relate that to comprehend a school district is to think of it as a system that is "an entity which exists in its surroundings, (and) draws on an environment for support (while) producing a service the environment finds important" (p. 10).

5.2

School System Classifications

Rational Systems

In recent years, the notion of a school system has undergone considerable change. Earlier models were usually associated with a closed system -- a **rational** or formally structured system designed to obtain specific goals. The two critical elements -- **goals and formalization of structure** -- were determined by other system characteristics and components as organizational **behavior, structure, leadership roles and effectiveness.** For example, the leadership role was often the unit of analysis and the structure was seen as the schematic format that accounted for routine interaction among the different leadership roles. Characterized by **precise boundaries, rules, regulations, fixed division of labor, hierarchy of office, technical expertise, rigidity, constraints, procedures and**

compliances, the rational system approach was rooted in the classical model of bureaucratic **hierarchy** (Weber, 1965). Scott (1981) describes this approach as one in which "goals supply the value premise that underlie decisions -- the more precise and specific the value process, the greater the impact on resulting decisions" (p. 73). Rational systems concentrate on normative structure, virtually ignoring the behavioral patterns of organizations (Meyers et al.,1978; Scott , 1981; Bacharach & Mitchell, 1987; Hoy & Miskell, 1991) .

Such a rational systems approach was adequate for evaluating or analyzing the internal operations of an organization. Its weaknesses, however, were quite apparent in its assumptions about closure and when used in an attempt toexplain changes in organizations (Mott, 1972). Applications of the concept are exemplified in MBO (Management by Objectives), PPBS (Planning, Program and Budgeting Systems) strategies, and PERT (Performance, Evaluation, and Review Technologies) -- all of which are used for greater accountability and for facilitating rational decisions that especially apply to economy of finances and goal achievement.

Natural Systems

School systems today are usually seen as natural systems, open to and involved in various exchanges with their environments. These exchanges can be controlled to some extent by degrees of openness but, depending on the environment, even the degrees can vary. For example, school systems resemble natural systems in that they emphasize a human relations approach (Hoy et al.,1990), stress the role of the **individual** -- especially in groups (Ouchi, 1981), and evolve informal, natural, spontaneous behaviors in an

organizational structure that depend greatly on the interpersonal skills of managers. Most business concerns today subscribe to the importance of the individual in the successful operation of an organization, a quality also of the open system concept and well substantiated in each report of the Financial Post's "100 Best Companies in Canada" (1987).

Loosely Coupled Systems

School systems are also often described as **loosely coupled systems.** Like the natural system, a loosely coupled system takes the individual, not the organization, as the unit of analysis (Bacharach & Mitchell, 1987). Rather than being tightly controlled, these systems, as in the case of so many Nova Scotian and Canadian school districts, are politically vulnerable and organizationally loose. Because they lack internal coordination, inter - dependence among sub-systems and the links between intentions and actions may be unclear and indeterminate (Meyer et al.,1978; Weick, 1983). The degree of structure depends on the extent to which sub-system behavior is defined and constrained by regulations. Deer (1976) and Fullen (1980) characterized loosely coupled school systems as organizations where accountability and interdependency of sub-units are low and autonomy is high. The components purposefully are not closely connected with each other and, regardless of the level, do little to determine or control each other's activities. Loosely coupled systems, being more susceptible to outside groups, respond more flexibly to environmental threats, seal off problem areas, and increase the sense of efficacy and autonomy felt by members (Data and Perloff, 1979).

Open Systems

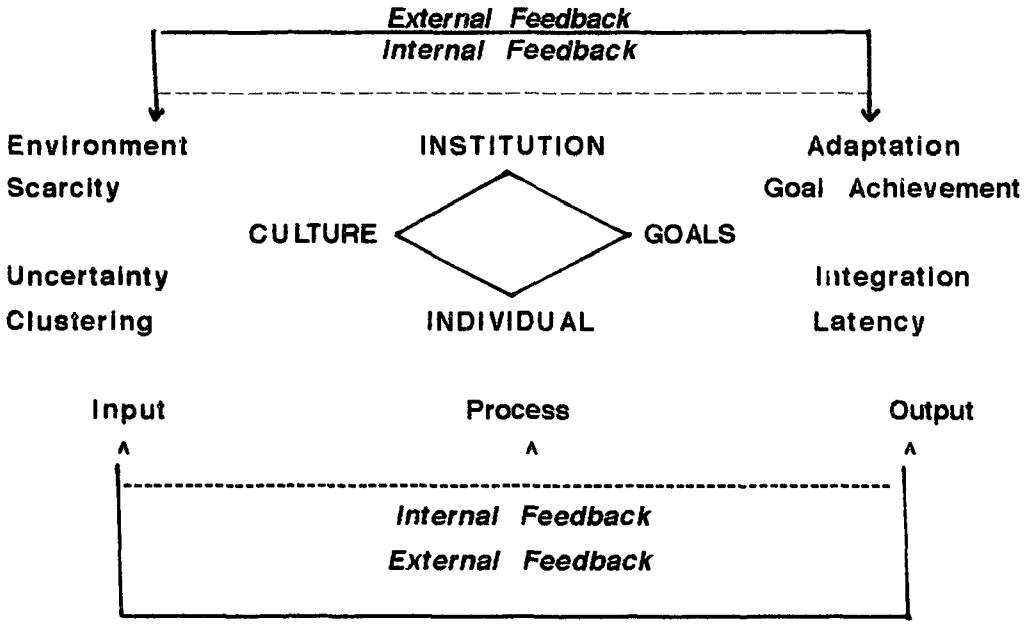
Such concepts as role and formal considerations (rational/closed system), social and informal groups (natural/loosely coupled system), while still useful and practiced, are not as useful to the understanding of what a system is and what constitutes the components of a school system as the open system concept. Under the open system concept, school system components and characteristics are readily enumerated. Organizations are considered as influenced by and dependent upon their **environments.** The open system takes **inputs** from its environment and transforms or **processes** them to produce an **output** or product (see Figure 5.1). The capacity of the system for **feedback** (information about the system that helps to generate itself), **adaptation** (to prevent disintegration from the changing demands from its environment), and **equifinality** (its ability to reach a desired goal through a number of different means) are among the characteristic elements of the open system. Moreover, its capacity to be flexible, not static, acknowledges the system's ability to move towards a steady state of equilibrium, called **homeostasis** (Katz and Kahn,1966; Meyer, 1971; Olsen, 1978).

Other

Aside from these four major classifications of social systems (rational, natural, loosely coupled, and open), other theorists, most expressly, Talcott Parsons (1966), have conceptualized other system frameworks according to the primary societal functions they perform for society. The basis for classifying these societal functions is AGIL -- a well known Parsonic acronym which posits that all social systems, if they are to exist, must satisfy four basic functions: **Adaptation** - problem of acquiring sufficient resources and

accommodating to the realities and demands of the environment, **Goal Achievement** -- mobilizing resources for the setting, implementing, and obtaining of pertinent objectives and goals, **Integration** -- coordinating, unifying, and solidifying activities of members and units, and **Latency** -- maintaining and renewing motivational and cultural patterns to create, preserve, and transmit the systems distinct culture (Figure 5.2).

Figure 5.2: SOCIAL SYSTEM MODEL FOR SCHOOLS
(Adapted from Hoy and Miskel, 1987, p.72)



Parsons postulated that while organizations, according to their conceptual framework, may specialize in one of the four functions, a system must satisfy collectively all four factors (AGIL) if it is to develop and survive (Chodak, 1973; Scott , 1981); in other words, the totality of the whole system is more than just the sum of its parts (Olsen, 1978). Plagued by this scarcity and uncertainty, and employing buffering or clustering strategies (Figure 5.2),

all school systems struggle to maintain favourable transactions of inputs and outputs with their environments in order to survive (Thompson, 1967; Nadler, 1987). For example, Hayman (1975) refers to a surviving strategy he calls variety reduction; i.e., protecting the system from changes in its environment by maintaining the activities of the system within a certain range in order to keep control and avoid deterioration of goals. This is a strategy practiced today by most school districts faced with severe financial shortfalls.

All school systems are dramatically concerned with survival and growth. As a result, open school systems must perform enduring cycles of input, process, and output transactions with their environment in an efficient, flexible, and effective way in order to achieve their goals and to survive. Over a time, school systems evolve patterns of behavior to respond to such problems; for example, they develop **feedback loops** (Figure 5.2) and flexible strategies to achieve a better use of resources (Brown, 1980).

5.3

School System Components

In a Social Systems Context

Throughout this study, the school system is framed as a complex and open social system, evaluated constantly by "feedback mechanisms" and open to and dependent upon **environmental** influences and internal components **(structure, goals and processes)**. For example, concerned with survival and growth, a school system is dependent on the **environment**. School systems interact constantly with their **environment**, perform exchanges with it, are partially bounded and self regulating within it, and are replenished cyclically by the economic, cultural, and political statuses of that environment.

Such environmental components as **technology and structure** translate into inputs and outputs and are constantly gauged by a **feedback loop** between the organization and its environment (Homans, 1950; Katz and Kahn, 1966; Thompson, 1967; Stephens,1975; Scott, 1981; King et al., 1981 and Lorch, 1987). Among these significant components of school systems in a social systems context that have been mentioned, three specifically stand out as key components of a school system: (a) **feedback** (communication), (b) **environment**, and (c) **interaction.**

(a) **Feedback:** Feedback (communication) is in itself a key interactive component. Meyers (1971) claimed that all school systems are evaluated incessantly " by 'feedback' mechanisms (reports, projections, statements or performance, etc.) which exist in abundance" (p. 10). Feedback, a self-directed feature of systems, is akin to evaluation. There must be a feedback loop (Poppe et al., 1979) -- even a feedforward one (Olsen, 1978) because systems are open to and dependent upon environmental influences and pressure.

(b) **Environment:** Scott (1981), Jolly & Gramenz (1987), and Hoy & Miskell (1987) portray the school system as a social system capable of self- maintenance and dependent on a thorough input of resources from its environment. Less constrained and more flexible, the system, noted Rushing & Zald (1976), was always in the "process of reallocating and reintegrating" (p. 204). Its most significant characteristic is its dependency on the environment and the reciprocal ties that bind and interrelate it to its surroundings. The environment is the ultimate source of materials, energy, resources and information. Vital for the open systems' continuation is that is must adapt to survive. "Organizations", asserted Scott (1981), are believed

to place their own survival over goal attainment" (p. 131). The environment, therefore, is the remedy for the uncertainty and scarcity that plagues the present day school system. Survival has replaced goal attainment as its modus operandi.

(c) **Interaction:** Although some theorists acknowledge that school districts are the sum of many different and separate individual parts, they neglect the systemic **interactions and interrelationships** of school system components that comprise the dynamic and complex world of school systems (Stufflebeam andShenfield,1985). Hoy and Miskel's (1987) dictum is "that other things being equal, the greater the degree of congruence among the elements of the system, the more efficient the system" (p. 70). A school system succeeds or fails on the collective efficient or inefficient functioning of its varied components. The set of open systems components and their **function, interaction and congruence** is extremely relevant to school systems evaluation.

Advocated in this study, therefore, is a comprehensive evaluation of the domain of the major components that constitute a school system and of how their interdependence influences the quality of education. By examining the whole through a systemic assessment of sub-units, an insight and an identification of significant factors that require initiating, altering, monitoring or terminating can be illuminated. For example, in goal development and implementation, the interaction of all other components -- leadership, communication, decision-making, environment , structure (role), and accountability -- are seen as crucial to the success of goal attainment.

(d) **Other:** Aside from such key components as **feedback loops**, **environment**, and **interaction**, other system elements

(technology, structure/roles,culture, leadership, workplace, communication, and decision making), obtained from the literature review (Table 4.4) also shape the behavior, the formal and informal cultural processes, and the **goals** that constitute relationships within and without the system. Mott (1972) claims that, if one wishes to comprehend the organization, understanding these school system components is more important than the classifications of systems and their theoretical concepts. Chiefly influenced by such components are the **individuals (workforce)** within the school system. They have their own needs. Their **interaction** creates their own values, and they are affected by the adaptation, integration, and latency qualities of the school system. As mentioned previously, this systemic cross component involvement (**environmental -organizational - individual**) provides an understanding of school systems and allows one to gauge their effectiveness and efficiency.

In a Public School System Context

Public school systems are not complex organizations, composed of **formal institutionalized structures designed to achieve specified goals and objectives**, but of individuals who posses their own needs and beliefs that often conflict with organizational expectations. A public school system is a composite of **interdependent organized units where individuals make decisions and where structure and process are more flexible and less restrained** (Dalta and Perloff, 1978; Meyers et al., 1978).

The internal interactive and interdependent sub-units and sub-systems, coupled with its external environment (locally, municipally, provincially and federally) best describe the present public school system and

the multiplicity of pressures, accountabilities, and complexities with which it must cope. Any researcher concerned with the evaluation or operation of a public school system must understand the importance of **environment** and the nature of its **interactions** (often called cross-boundary transactions) that involve individuals both internally and externally.

There is no clear separation of the school district from its environment, although, depending upon the needs or conflicts that may arise, authorities, like gatekeepers, try to control the degree of openness. A public school system constantly engages in self-maintenance based on a thorough input of and reliance upon environmental resources. As already mentioned, organizations take **inputs** from the environments, **process** them, and **produce** outputs. In the same way, public school systems take resources (students, labor, direction, money, facilities, etc.) from the environment, and transform them by educational transactions (behavior, climate, teaching and learning) to produce an output (performance, achievement and attitudes). In a constant struggle to maintain equilibrium, a public school system changes as its **environment** changes (Mann, 1981).

5.4

School System Comparisons

(A) A Comparison of School System Components in Closed and Open Social Systems

Three comparisons are offered: closed versus open systems; social vs. public systems, and theoretical vs. practical systems. Firstly, from a discussion of school systems components in a social system context, two polar views of systems, open and closed, are contrasted (Table 5.1).

Table 5.1 **COMPONENTS OF A SCHOOL SYSTEM**
(as delineated from two polar views of systems)

COMPONENT	OPEN SYSTEM	CLOSED SYSTEMS
1. **ENVIRONMENT**	coping with the effects of the EXTERNAL environment.	coping with problems in context of INTERNAL environment
	open/related boundaries	closed/ separate boundaries
	conflicting/ competitive	normative/ compliance
2. **GOALS**	flexible	rigid/specific
	team consensus	individual
	qualitative	quantitative
3. **ROLES/ STRUCTURE**	informal	formal/authorative
	horizontal	vertical
	changing	routine/static
	action	order
	adaptable	rules/regulations
	varied	limited
4. **WORK FORCE**	individual the priority self actualization	task the priority
5. **FEEDBACK**:	continuous loop	top-down
6. **WORK PLACE**:	culture	constraints
	human relations approach	hierarchal
	technical core at higher levels	(routine, technical
	negates routine	core at lower levels)
	homeostasis	
7. **INTERACTION**	interrelated and interdependent elements	separate dependent
8. **PROCESS**	input - process - output	

(Although they may vary in their intensity, open and closed system characteristics and components and are found at every level of school systems -- formal and informal. Having extracted these components from a literature review of school systems, a further investigation of public school system components in contrast to social system components (Table 5.2], also serves as a further comparison].

(B) COMPARISON OF PUBLIC SCHOOL SYSTEM COMPONENTS IN THEORETICAL AND ACTUAL SCHOOL SYSTEM CONTEXTS

The theoretical concepts of school systems, as described in this chapter, can be compared and translated into the practical components of the actual living organism -- the public school system. Figure 5.3 attempts to create that comparison and to present the public school system, first of all, in a theoretical systems context .

Figure 5.3 : THE PUBLIC SCHOOL SYSTEM
[In a Theoretical System context]

E N V I R O N M E N T
parents / groups / geography / municipal government / unions
social ---- economic ---- political ---- culture

1		2		3
INPUT	>>>>>>>	**PROCESS**	>>>>>>>	**OUTPUT**
Resources (to achieve goals, expectations)		Supporting Adopting / Improving Providing		Educated/ quality students, attitudes, behaviors, achievement
Students		Program & Instruction (teaching/learning)		Drop-outs
Personnel		relating coordinating / expectations integrating		Improvement (changes)

RECEIVED >< **TRANSACTED** >< **RETURNED**
Outside agencies/colleges/universities/Dept.of Education/Other School Districts

E N V I R O N M E N T

(other activities related to the above are processes or functional characteristics)
- MacLellan, 1992

While the "theoretical" definition of a school system is comprehended as an entity, comprised of a set of "holistic" interactive components that draw upon the environment for its support and produces an

important service for its stakeholders, the "actual" (practical)public school system is, literally speaking, an ABC organization. The acronym (A.B.C.) encompasses the public schools system components in a practical context as :

> A - **Academic** - teachers, students, administrators, support staff, etc. (including all program components, supplies, resources and facilities),
>
> B - **Business** - finances (operating and capital receipts, expenditures and debts),
>
> C - **Community** (environment), **Conveyance** (pupil transportation), and **Care/Maintenance** (property services)

Analyzing the theoretical and the practical, the list of school system components, as synthesized from the examination of school districts as social and public school systems, are compared in Table 5.2.

(C): COMPARISON OF SCHOOL SYSTEM COMPONENTS IN A SOCIAL SYSTEM AND PUBLIC SCHOOL SYSTEM CONTEXT

Table 5.2

	SCHOOL SYSTEM COMPONENTS	
	as a social system	as a public school system
1.*ENVIRONMENT*	the external surrounding & exchanges (dependability ~ adaptability)	community & stakeholders
2.*GOALS*	setting implementing optimizing	mission statement philosophy alignment of district and school goals
3.*STRUCTURE & TECHNOLOGY*	formal informal roles	board, regulations/policies, administrative roles, organizatio schema
4.*WORK FORCE*	a clearly defined population	teaching & support staff, students, In-service, P.D.

	as a social system	as a public school system
5. ***COMMUNICATION***	feedback loop	feedback loop
6. ***WORK PLACE***	unique culture social relationship climate	unique culture social relationship climate
7. ***INTERACTION***	patterns of sub-units and sub- systems	maintenance conveyance finances schools
8. ***PROCESS***	input-process output	resource acquisition (teachers and finance) transactions (instruction) outcomes (product)
9. ***CURRICULUM***	- - - - - - -	public school program (PSP), departmental guides,school syllabi long term (strategic planning) goals

Summary:

School systems may be defined in various ways, depending upon the context in which they are viewed -- be that open, closed, public, social, etc. in this study, a school system is defined as an open system of interaction among the many components of which it is composed. These components form an organized whole serving a common purpose: education. School systems may be classified as rational, natural, and loosely coupled -- the latter being the most applicable description of most of our public school systems.

The social system model of a school system is predicated on distinct components. Nine components have been tabulated according to their permanence and prominence in a review of the literature relative to

school system classifications that have been discussed extensively in this section. From the systemic review of the evaluation literature/theories, the same nine components were also consistently revealed and extrapolated. All **nine** components, as illustrated in Table 5.2, compare also with open/closed system components in Table 5.1 and combine with four additional major components of school systems; namely, **leadership,decision-making, culture, and climate** (as revealed in the data analysis at the end of this chapter) to assist in forming the framework for a new approach towards school system evaluation.

[***The data results from the review of the literature relative to school systems literature and studies, follow on the next page]***

DATA ANALYSIS OF LITERATURE RELATIVE TO SCHOOL SYSTEMS: 2 of 4

II: *An analysis of School Systems Literature/Studies*

LEGEND: (1) GLS [GOALS]; (2) ENV [ENVIRONMENT]; (3) LEA [LEADERSHIP]; (4) STR [STRUCTURE]; (5) W.F. [WORKFORCE] (6) INT [INTERACTION]; (7) PRO [PROCESS]; (8) DM [DECISION-MAKING]; (9) W.P. [WORK PLACE]; (10) CUL [CULTURE], (11) CHA (CHANGE], (12) COM [COMMUNICATION]; (13) CUR [CURRICULUM]; (14) ACC [ACCOUNTABILITY]; (15) POL [POLITICS]

	1 GLS	2 ENV	3 LEA	4 STR	5 W F	6 INT	7 PRO	8 DM	9 W P	10 CUL	11 CHA	12 COM	13 CUR	14 ACC	15 POL
Bacharach & Mitchell (1987)	X	X		X	X	X	X	X							
Blau & Schoenderr (1971)		X		X	X	X		X				X			
Boyan (1988)	X						X		X	X	X				
Burke (1980)		X													
Burnham (1973)	X	X				X	X			X					
Bramer et al (1970)				X											
Connolly & Pondy (1980)		X	X			X				X					
Chodak (1973)	X			X		X		X							
Cummings (1980)		X		X		X						X			
Dalta & Parloff (1977)	X	X		X				X							
Drucker (1973)			X									X			
Esyang (1980)	X		X			X		X		X		X			
Etzioni 1975)	X	X			X	X	X								
Etzioni (1981)	X														
Everd (1980)	X	X		X		X			X	X	X			X	
Florid & Halsey (1978)		X		X					X						
Frederiksen (1982)	X		X	X	X	X	X		X	X					
Fullen (1980)	X	X	X	X	X	X			X	X	X	X			
Galbraith (1980)							X								
Geertz (1975)				X					X						
Gross et al (1970)				X					X		X				
Gue (1985)		X	X		X		X	X	X	X		X			
Hanson (1970)		X	X		X										
Hou, Marsh & Mannan (1983)						X	X								
Hoy & Miskel (1987)	X	X	X	X	X	X	X	X	X	X	X	X		X	
Hoyle (1983)	X			X		X									
Katz & Kahn (1978)	X		X	X		X	X	X				X			
Krapp (1979)		X		X	X	X	X	X							
Krapel & Gaspanetto (1982)				X	X	X									
	1 GLS	2 ENV	3 LEA	4 STR	5 W F	6 INT	7 PRO	8 DM	9 W P	10 CUL	11 CHA	12 COM	13 CUR	14 ACC	15 POL

II: ***An analysis of School Systems Literature/Studies (Cont'd):***

	1 GLS	2 ENV	3 LEA	4 STR	5 W F	6 INT	7 PRO	8 DM	9 W P	10 CUL	11 CHA	12 COM	13 CUR	14 ACC	15 POL
Litchfield (1985)	X		X			X		X	X			X		X	
Laroque (1986)						X									
Lathman (1982					X										
Liberman (1982)				X			X								
Lockett & Spear (1980)	X					X									
Mann (1976)					X	X						X			
Markus (1984)	X											X			
Meyer (1971		X	X	X									X		
Olsen (1978)		X		X		X	X			X				X	
Parsons (1973)														X	
Popper (1978)		X		X		X	X			X	X	X			
Reason (1980)											X				
Rushing (1976)	X	X													
Scott (1970)	X	X										X			
Scott, W (1981a)		X		X							X	X			
Scott, W (1981b)		X		X			X				X	X			
Silver (1973)	X	X	X	X	X	X	X	X	X		X				
Stephens (1975)		X									X	X			
Van Bertalanfly (1980)		X	X				X		X		X				
Weick (1983)		X	X		X		X		X	X					
Zalatimo & Sleeman (1975)	X	X		X	X	X	X				X				
	1 GLS	2 ENV	3 LEA	4 STR	5 W F	6 INT	7 PRO	8 DM	9 W P	10 CUL	11 CHA	12 COM	13 CUR	14 ACC	15 POL
SUB-TOTAL ('70'S) (23)	12	15	6	14	8	12	8	6	6	2	6	7	1	2	0
SUB-TOTAL ('80'S) (28)	10	12	7	11	7	14	12	4	8	9	9	7	0	3	0
TOTALS (51)	22	27	13	25	15	26	20	10	14	11	15	14	1	5	0

CHAPTER VI

REVIEW AND ANALYSIS OF ORGANIZATIONAL AND SCHOOL EFFECTIVENESS LITERATURE

Introduction

In a similar vein [as was accomplished with a review of the literature pertaining to evaluation (Chapter 3), evaluation models (Chapter 4),and school system studies (Chapter 5)], a review of the literature pertaining to organizational effectiveness and effective school studies was undertaken to also gauge important school system components. To this end, explanation and derivation are given in the two sections of this chapter in order to present definitive school system components as extrapolated from organizational effectiveness and effective schools literature. Although a full data analysis of organizational effectiveness and school effective studies is given at the end of the chapter, a comparison of some school system components already reviewed in the previous chapters, is made with selected and leading authors of organizational effectiveness as well as with school system reviews in Alberta and Nova Scotia.

6.1

ORGANIZATIONAL EFFECTIVENESS LITERATURE

Comparison of components

Quality school system components, as deemed important by prominent organizational effectiveness writers, are compiled in Table 6.1. In order to offer a comparison with current evaluation practices in Canada, components

of school system evaluation, as practiced in the evaluations conducted by Alberta Education and the Nova Scotia Department of Education School Reviews of 1978-1991, are also included in the tabulations featured in Table 6.1. (A more extensive review of organizational and school effectiveness literature/studies can be found in the data analyses that follow the summary at the end of this chapter).

Table 6.1

COMPARISON OF SCHOOL SYSTEM COMPONENTS WITH SELECTED AUTHORS OF ORGANIZATIONAL EFFECTIVENESS STUDIES AND SCHOOL SSTEM REVIEWS:

LEGEND: (1) GLS [GOALS], (2) ENV [ENVIRONMENT]; (3) LEA [LEADERSHIP], (4) STR [STRUCTURE]; (5) W.F. [WORK FORCE]; (6) INT [INTERACTION]; (7) PRO [PROCESS]; (8) DM [DECISION-MAKING]; (9 W.P. [WORK PLACE]; (10) CUL [CULTURE (11) CHA (CHANGE]; (12) COM [COMMUNICATION], (13) CUR [CURRICULUM]; (14) ACC [ACCOUNTABILITY] (15) POL [POLITICS]

[Arranged by year]	1 GLS	2 ENV	3 LEA	4 STR	5 WF	6 INT	7 PRO	8 DM	9 WP	10 CUL	11 CHA	12 COM	13 CUR
Likert (1967)		X	X				X	X	X				
Mott (1973)	X	X	X	X		X					X	X	X
Campbell (1977)	X	X	X	X	X	X	X		X			X	X
Steers (1975)	X		X	X		X						X	
Scott (1977)						X		X					
Tuckman (1979)		X		X	X				X				
Kanter (1983)									X		X	X	
Ratsoy & Miklos (1985)	X	X	X	X		*			*			*	*
Nowakowski (1985)	X		X	X						X			
Porter (1991)					X					X		X	
Alberta Education '90	*	*	*				*						
Nova Scotia School Districts Evaluation 1978-1991 (26 surveys/reviews	*	*		*		*	*				X	*	X

* included within other components or designations

The comparison reveals that, while components of school systems are specifically delineated in organizational effectiveness literature, the same components (other than **curriculum** and **change**; i.e., the course of study and recommendations) are usually either included with other aspects of a school system review and/or alluded to in the many administrative sections (finance, board, management, transportation, and maintenance) of a school system review.

Recognized for their contribution and significance to organizational effectiveness literature, the authors represented in Figure 6.1; namely, (Likert, 1967; Mott, 1972; Campbell, 1977; Steers, 1975; Scott, 1977; Campbell, 1977; Tuckman, 1979; Kanter, 1983; Ratsoy and Miklos, 1985; Nowakowski, 1985 and Porter, 1991) present a lengthy list of criteria/ components to evaluate school systems effectiveness.

Mott (1972) listed the characteristics of an effective organization as **environment, structure, communication, personnel, culture, adaptation, goals and leadership.** From seventeen studies on the measurement of organizational effectiveness, Steers (1975a) extrapolated fifteen "relevant" different variables or criteria. Of the fifteen, three were pronounced very important; namely, adaptation/ flexibility, productivity and employee satisfaction (although a number of the minor variables actually dealt with and used the expression "**work force**"). Interestingly, environmental control and resource acquisition, open communication, and survival, while included, ranked lower. In Steer's (1975b) major treatise on organization effectiveness, four major systemic components are enumerated and fully explicated; namely, **structure** and **technology**, **environment**, **employees** and **management**.

Scott (1977) posited that measures or **indicators**, as **outcomes, processes, and structures** (all organizational features with participant characteristics) were central components in establishing criteria for evaluating the effectiveness of an organization. From a search of literature, conducted in 1974 by Campbell (1977), a list of thirty criteria, measures, and/or categories of organizational effectiveness was extrapolated. Of these thirty variables proposed as "serious" indicators, twelve dealt with the **workforce:** (1) turnover, (2) job satisfaction, (3) accidents, (4).growth, (5) absenteeism, (6) motivation, (7) morale, (8) conflict/ cohesion, (9) individual worth, (10) participation/shared influence, (11) stability, and (12) training/ professional development. To judge the overall effectiveness of an organization, other indicators such as **change, goals** (setting, planning, internalizing, achievement), growth, **leadership, management, communication, environment, decision-making, structure/role, and workplace**, were included, as well as generic industrial components such as profit, quality and productivity.

Kanter (1983) posited four major indicators of social systems: (1) **innovation**, (2) **culture**, (3) **climate**, and (4) empowerment (of employees in **decision making).** Ratsoy and Miklos (1985), using questionnaires from educators, support staff and non-certified personnel, developed a set of instruments to assess school district effectiveness. Their five "categories of potential effective indicators" included: **(1) goals** (e.g., operative, intended/not intended), (2) **personel** characteristics (professionalism, decision-making, communication, administrative behavior), (3) **organizational variables (e.g., structure, technology), (4) environmental variables** (e.g., **change**, linkages, finances) and (5) other

outcomes (e.g., client satisfaction, adaptability). Ratsoy (1983) referred to this configuration of five major indicators as a "frying pan model" (i.e., getting a handle on the concept of school system evaluation). All five indicators are accompanied by a detailed checklist to determine the present status and concern of each component.

In A Handbook of Educational Variables, Nowakowski et al. (1985) enumerates eight salient components: business and finance, **curriculum** and instruction, policy, planning and evaluation, pupil personnel, staff **personnel, school-community relations, and school management.** Porter (1991) suggests that what is needed in the creation of a system of school process indicators/components, are variables that make it possible to monitor **curriculum,** instruction, and **classroom environment.** However, what is really wanted from our educational system, he decrees, are knowledge of outputs and **change.**

While the resulting quality components as enumerated in Table 6.1 bear some resemblance to those devised by other researchers and the literature review as explicated in the previous two chapters, the components "weights" (rankings) vary when placed on continuums of ranked order according to the specific classifications of literature that were reviewed; viz, Educational Evaluation Literature, School Systems Literature, Effective School Literature, and , in this case, Organizational Effectiveness Literature (Tables 7.3, 7.4 & 7.5). As Campbell (1977) points out, such variances occur because different researchers adhere to different models and lists that have been put together from different conceptual points of view as exemplified from the data tabulated from the above four categories of the literature review. They are, in essence, the means and ends that call for valued judgements, either

implicitly or explicitly, on somebody's part.

6.2

SCHOOL EFFECTIVENESS STUDIES

Introduction

Before any school system pursues a review program, an awareness of the components and characteristics from effective schools literature would help to provide a good framework for school system improvement. Effective school administration is predicated on the assumption that school administrators know the characteristics of effective schools, understand the barriers which mitigate against effectiveness, and appreciate and develop the necessary skills. Edmonds (1979) posits that good administrators, like good teachers, do things that can be identified and do them consistently and purposefully with a firm belief in synergy: the belief that everyone has a contribution to make and that success belongs to all.

For the past two decades of the '70's and 80's, effective school studies have revealed the component and characteristics that relate to activities for school system improvements in attitudes, management, time, achievement, etc. The major characteristics of effective schools that "have emerged from research, and which have become classic" (Davis & Thomas, 1989, p.12) include:

- Strong instructional **LEADERSHIP**
- A safe and orderly **climate (WORKPLACE)**
- High **EXPECTATIONS** for achievement

- Emphasis on basic skills (**CURRICULUM**)
- Continual monitoring of **PROCESS** and progress
- **GOALS** -- clear and well understood.
- **CULTURE**

In the data results of the review of school effectiveness literature which follows this chapter, it is interesting to note that in the tabulation of the above mentioned components, **leadership, workforce, workplace, goals, environment, curriculum, culture, and structure** rank 1, 2, 3, 4, 5, 6, 8, and 9 respectively. Other pertinent components as **interaction** (Sackney, 1986; Duignan, 1986), **communication** (Walburg, 1979; Deal & Kennedy, 1982), **decision-making** (David, 1989; Davis & Thomas, 1989), and **change** (Peters & Austin, 1985; Dufour & Eaher, 1987) abound in effective schools literature. Although each of these components are fully explicated (according to their classifications and pertinent characteristics) in Chapter VIII and further outlined in the Tables that follow each section of Chapter VIII, the question often arises of distinguishing a definition of school effectiveness.

Mann (1976) defined an effective school as one that is above prediction -- a valued added enterprise. Purkey and Smith (1982) described an effective school as one "characterized by high evaluations of students, high expectations, and high norms of achievement" (p.65). Brookover and Lezotte (1977) and Mortimer and Sammons (1987) termed an effective school as one of product and process -- the product governed by a set of goals, and the

process based upon an enjoyable learning environment. Schein (1985) determined that an effective institution was distinguished by its culture -- a process and climate of shared values, assumptions, and norms that channel staff and students in the direction of successful teaching and learning.

In response to Coleman's (1966) conclusion that schools made little or no difference in a student's achievement, Weber's study (1971) of four effective inner-city schools cited the curriculum (especially reading) as contributing to the success of students. Moreover, Rutter et al. (1979) confirmed that effectiveness was not attributed solely to a family's socio-economic status but depended on goal alignment, a pleasant environment, a positive workforce, and good leadership. Purkey & Smith's (1982) portrait of an effective school system underscored the importance of the components of leadership, collaborative decision-making, clear goals, system-wide culture, safe environment, and a dedicated workforce. While many critics have labeled the effectiveschools movement as a fad, the search of the literature consistently produces major components -- three of which, for example, are:

Leadership: A large quantity of effective schools literature claims that the leadership function is the most important component of any organization (Mortimer & Sammons, 1987; Davis & Thomas,1989). Leadership must not only encompass the skills of managing and leading but also contribute to the decision-making, planning, interacting and collaborating skills of the workforce. The importance of the various styles, behaviours, and classification of leadership are discussed in great detail in Chapter 8.1. Peters & Waterman (1985) found that leaders of excellent companies infused enthusiasm, excitement, and, most importantly, meaning into the workforce. They referred to leaders as "value shapers" who did not rely on personal

magnetism to be effective but learned and worked hard to be efficient leaders. Sergiovanni's (1984) portrait of a leader (explicated in detail in Chapter 8.1 and used as the framework for the "how-to" evaluation guide that appends that section), combines five areas as the domain of the leader: technical, humanistic, educational, symbolic, and cultural.

Goals: There are many other strong components of school systems that arise from effective schools research. Particularly noteable are the new specific terms that substitute for **goals**; namely "**focus**" (Edmonds, 1979, Clark et al, 1989), "**vision**" (Hannish, 1987; Renihan & Renihan, 1989), "**mission**" (Good & Brophy, 1984; Reinhan & Reinhan, 1984), and "**purpose**" (Firestone & Herriott, 1982; Lezotte, 1982). Among the most noteworthy goals of a system, as extrapolated from effective school research, is the mission or purpose of high expectations. This characteristic includes not only what teachers expect of students but also what administrators expect from their staff. And it is a tremendous asset if the expectations of children by parents align with those of the teachers and administrators. The members of the workforce must put their best efforts into planning and instructing, not only conveying to the students their belief in the student's ability to learn but also by demanding the best performance from their students.

Culture: The environment is characterized by the school system's culture which, according to Sergiovanni (1984) and Trew (1989), is described as the collective programming of the mind that distinguishes one system from another. Culture, as described in more detail in Chapter VIII, is the collectivity of norms, values, assumptions, belief systems, and shared meanings of the stakeholders of a school system. The more understood, accepted and cohesive the culture of a school system is, the better able the

system is to move in concert towards ideals it hold and objectives it wishes to pursue and preserve. Therefore, an effective school system is distinguished by its culture. The culture of a system should be continually monitored to assess whether or not it enhances the workforce and the workplace.

Effective School Studies

The creation of a successful school system is underscored in the effective schools research of Edmonds (1979). He delineated five components that constitute effective schools and for the ingredients of a strong foundation for any school system). They are: (1) strong instructional leadership, (2) high expectations for students, (3) an orderly-oriented environment, (4) priority focus on instruction, and (5) frequent monitoring.

Through several "windows" and "panes", Waldron's (1983) study of effective schools mirrors many of the research findings of Rutter et al (1979), Edmonds (1979), Austin (1979), Good & Brophy (1979), and Lezotte (1982) in that Waldron underscores seven components of more effective schools: (1) leadership/decision-making, (2) structure, (3) environment, (4) goals, (5) interaction, (6) the use of rewards and praise, and (7) the emphasis on learning. Waldron also stresses the importance of modeling positive staff interaction and staff culture. Among the seven characteristics identified by Larry Sackney (1986) as part of the Calgary study, are leadership, interaction, and the need for a positive ethos in the workplace and environment.

In comparison with the other sources of the review of the literature relative to evaluation and school systems, Reinhan, Reinhan, & Waldron (1986) posit that successful effective schools exemplify an "open system" philosophy. Such systems procure a very high level of commitment

from the workforce and the workplace. In the "15, 000 hours" study of Rutter et al. (1979), the conclusion is that effective schools, guided by a myriad of qualities as praising achievement, attendance, and good behaviour in students, does foster an environment conducive to learning.

Fullan (1985) posited that leadership, goals, interaction, communication, and process were the four fundamental factors underlying successful school system improvement. These four important components are further expanded by Peters & Waterman (1985) as attributes that characterize excellent systems through their asserted commitment (leadership), mission and focus (goals), participation (interaction/communication) and action (process).

Summary

As a result of the literature review regarding school effectiveness, an evaluator can demonstrate that a school system is effective by assessing the goals, leadership, curriculum, interaction, environment, communication, culture, change, structure, process, workforce, decision-making, and workplace of the school system -- components of which, as tabulated from the analyses of the research of the literature, become part of the framework for a new approach to the evaluation of school systems. Such a framework provides the ability to change and to adapt the system towards excellence. Make a positive change in any of the components derived from the search of school effectiveness literature -- particularly leadership, curriculum, the workforce and the workplace, and you provide effectiveness in and for the school system. Lasley & Wayson (1982) emphasize that in such a change process, everyone in the workforce and workplace must be involved -- especially in decision-making

and in creating a positive school system environment. The school system must be seen as a place to experience success and to nuture self-esteem, intellectual growth, and self-discipline in students. Yet, of all the components that can be enumerated from effective schools research as being most significant in producing an effective school system, the most important component is leadership, particularly, the current and postmodern emphasis on transformational and symbolic leadership.

[***The data results from the review of the literature relative to organizational and school effectiveness literature and studies, follow on the next pages***].

DATA ANALYSIS/LITERATURE REVIEW RE ORGANIZATIONAL EFFECTIVENESS: 3 of 4

III: *An analysis of Organizational Effectiveness Literature/Studies:*

LEGEND (1) GLS [GOALS], (2) ENV [ENVIRONMENT], (3) LEA [LEADERSHIP], (4) STR [STRUCTURE]; (5) W F [WORKFORCE], (6) INT [INTERACTION], (7) PRO [PROCESS], (8) DM [DECISION-MAKING], (9) W P [WORK PLACE], (10) CUL [CULTURE], (11) CHA [CHANGE]; (12) COM [COMMUNICATION], (13) CUR [CURRICULUM], (14) ACC [ACCOUNTABILITY]; (15) POL [POLITICS]

	1 GLS	2 ENV	3 LEA	4 STR	5 W F	6 INT	7 PRO	8 DM	9 W P	10 CUL	11 CHA	12 COM	13 CUR	14 ACC	15 POL
Adrich (1979)	X			X	X					X	X				
Baridge & Deal(1983)		X		X			X	X							
Beer (1980)	X	X		X	X		X		X		X				
Bidwell & Kasorda (1975)		X	X	X			X								
Brown (1982)				X	X	X		X					X		
Campbell (1977)	X	X	X												
Campbell (1980a)	X	X		X	X	X	X		X			X			
Campbell (1980b)	X	X	X	X	X		X		X		X	X			
Dressler (1980)	X		X	X							X				
Goodman & Pennings (1977)									X	X	X				
Hanman & Freeman (1977)	X	X													
Meyer & Rowan (1983)	X		X	X											
Moss (1979)	X			X			X								
Mott (1972)	X	X		X	X		X		X	X	X		X		
Peters & Waterman (1982)	X		X		X			X		X	X				
Price (1972)	X					X		X							
Ratsoy (1972)	X	X	X		X										
Ratsoy (1983)	X	X	X	X	X				X		X				
Ratsoy & Miklos (1985)	X	X		X	X				X						
Rushing & Zald (1976)						X			X						
Schein (1985)			X							X					
Schulberg & Jerrell (1979)		X				X					X	X			
Steers (1978)				X	X										
Steers (1975)		X		X	X	X	X		X		X	X			
Steers (1977)	X	X	X	X	X	X									
Stephens (1975)		X			X	X									
Tichy (1980)				X			X	X							X
	1 GLS	2 ENV	3 LEA	4 STR	5 W F	6 INT	7 PRO	8 DM	9 W P	10 CUL	11 CHA	12 COM	13 CUR	14 ACC	15 POL

III: ***An analysis of Organizational Effectiveness Literature/Studies (Cont'd):***

	1 GLS	2 ENV	3 LEA	4 STR	5 W F	6 INT	7 PRO	8 DM	9 W P	10 CUL	11 CHA	12 COM	13 CUR	14 ACC	15 POL
Walburg (1979)		X									X				
Wnch (1978)				X											

	1 GLS	2 ENV	3 LEA	4 STR	5 W F	6 INT	7 PRO	8 DM	9 W P	10 CUL	11 CHA	12 COM	13 CUR	14 ACC	15 POL
SUB-TOTAL ('70'S] =17	8	10	4	8	6	6	5	1	4	3	6	3	0	0	0
SUB-TOTAL ('80'S)=12	8	6	6	10	8	2	4	4	5	2	5	3	1	0	1
TOTALS (29)	16	16	10	18	14	8	9	5	9	5	11	6	1	0	1

DATA ANALYSIS OF LITERATURE REVIEW RE EFFECTIVE SCHOOLS: 4 of 4

IV *An analysis of Effective SchoolsLiterature/Studies*

LEGEND: (1) GLS [GOALS], (2) ENV [ENVIRONMENT], (3) LEA [LEADERSHIP], (4) STR [STRUCTURE]; (5) W F [WORKFORCE]; (6) INT [INTERACTION]; (7) PRO [PROCESS], (8) DM [DECISION-MAKING], (9) W.P [WORK PLACE], (10) CUL [CULTURE]; (11) CHA [CHANGE]; (12) COM [COMMUNICATION]; (13) CUR [CURRICULUM]; (14) ACC [ACCOUNTABILITY], (15) POL [POLITICS]

	1 GLS	2 ENV	3 LEA	4 STR	5 W F	6 INT	7 PRO	8 DM	9 W P	10 CUL	11 CHA	12 COM	13 CUR	14 ACC	15 POL
Airasian et al (1979)	X		X		X	X						X	X		
Amn & Managieri (1988)			X		X				X						
Austin (1979)			X		X										
Bickel (1983)		X				X									
Brookover & Lezotte (1977)		X				X				X					
Burns (1978)			X	X											
ClarK et al (1989)		X	X		X								X		
David (1989)		X				X		X	X			X			
Davis & Thomas (1989)		X	X	X	X		X	X	X	X		X	X		
Dea' & Kennedy (1982)	X		X		X					X	X				
Dufour & Eaher (1987)			X			X			X						
Duignan (1986)		X	X			X		X					X		
Edmonds (1979)	X		X		X				X						
Emmer & Evertson (1981)		X	X												
Firestone & Hernott (1982)	X		X	X									X		
Fredenckson (1975)	X										X				
Good & Brophy (1979)	X		X		X				X	X			X		
Hamish (1987)	X			X											
House (1971)			X					X							
Howell (1981)			X												
Ingrassia (1982)		X	X		X				X						
Johnson (1989)	X	X	X		X										
Kotter (1982)	X		X												
Katguard & Hall (1978)			X					X	X						
Kohmoto (1987)		X	X			X			X				X		
Lezotte (1982)	X		X		X	X					X				
Lyons & Sheatelm (1988)	X	X	X		X				X						
Lotto (1982)	X		X						X						
	1 GLS	2 ENV	3 LEA	4 STR	5 W F	6 INT	7 PRO	8 DM	9 W P	10 CUL	11 CHA	12 COM	13 CUR	14 ACC	15 POL

IV: ***An analysis of EffectiveSchoolsLiterature/Studies(Cont'd):***

	1 GLS	2 ENV	3 LEA	4 STR	5 WF	6 INT	7 PRO	8 DM	9 WP	10 CUL	11 CHA	12 COM	13 CUR	14 ACC	15 POL
Manesse (1982)			X	X											
Mortimore & Sammons (1987)			X		X			X					X		
Miller et al (1985)					X					X					
McCormick-Larkin (1985)						X							X		
Murphy & Hallinger (1985)	X			X				X					X		
Peters & Austin (1985)	X	X	X		X			X	X			X			
Purkey & Smith (1982)			X				X		X	X			X		
Renihan & Renihan (1984)			X		X					X					
Rutter et al (1979)	X		X					X	X				X		
Sergiovanni (1984)			X	X	X					X					
Sergionanni & Starratt (1979)		X			X		X	X		X			X		
Synder (1983)	X							X							
Sackney (1986)					X				X	X					
Shoemaker & Fraser (1981)			X		X				X						
Sizer (1985)			X		X				X						
Stringfield &Teddlie (1983)						X		X	X						
Trew (1989)		X						X	X	X					
Walburg (1979)			X		X										
Waldron (1989)		X		X			X			X					
Weber (1971)		X	X	X		X									
	1 GLS	2 ENV	3 LEA	4 STR	5 WF	6 INT	7 PRO	8 DM	9 WP	10 CUL	11 CHA	12 COM	13 CUR	14 ACC	15 POL
SUB-TOTAL ('70'S*] =24	10	4	20	4	9	4	2	4	6	5	0	3	4	0	0
SUB-TOTAL ('80'S+)=24	7	11	14	4	13	7	2	9	13	6	1	3	10	0	0
TOTALS (48)	17	15	34	8	22	11	4	13	19	11	1	6	14	0	0

* ['70-82]
\+ [83-89]

CHAPTER VII

DEVELOPMENT of a NEW MODEL/APPROACH TOWARDS THE EVALUATION OF SCHOOL SYSTEMS

Introduction

The third and fourth purposes of this study: the delineation of the components and characteristics that comprise a school system and the devising of an approach/model that will adequately address school system evaluation, are developed in this chapter. To accomplish the third purpose, a comprehensive review and synthesis of the literature, theories, studies, school district documents, surveys,etc. of the past two decades pertaining to **evaluation** and **school systems**, was undertaken. The analysis of the collected data and the interpretation of the results (from the tabulation and ranking of key components from the four sources of the literature review as enumerated in the data analysis tables) are examined in detail in this chapter. Since evaluation is a process of identifiable components, the findings from this methodology of research, theory, and practice has resulted in a list of **thirteen** salient system components for the evaluation of school systems.

These thirteen significant components comprise a framework that accomplishes the fourth purpose of this study: devising a new approach to school system evaluation. The approach is called the **LINC *Interactive* Model** and consists of four domains: **L**: the three components of **L**eadership, Communication, and Decision-Making), **I** for Individual and Interaction, **N** for Nexus: a connecting group or series of four salient components (Goals, Environment, Structure and Process) that **interact** with each other, and **C**: the four components Culture, Change, Climate, and Curriculum. The framework

of the model and each of the thirteen components are fully illustrated and explicated in this and future chapters.

Also in this chapter, the **LINC *Interactive* Model** is compared with the evaluation models of the five prominent educational theorists (previously discussed in Chapter IV), in order (1) to indicate the contributions of these theorists and their models to school system evaluation and (2) to substantiate, through the contrast of the two approaches, the adequacy of the new **LINC *Interactive* Model** for school system evaluation.

The chapter concludes with a more detailed explanation of the holistic purposes and interactive perspectives of the model.

7.1

METHODOLOGICAL FINDINGS:

ANALYSIS OF DATA AND INTERPRETATION OF THE RESULTS

Extracting School Systems Evaluation Indicators/Components

As delineated in Chapter 2.2, regarding the development of a methodology that would result in the conceptualization of a new approach to school systems evaluation, a comprehensive review of the literature of the past two decades (the 1970's and1980's) pertaining to **evaluation** and **school systems** was conducted. This literature review (as itemized in the data analyses at the end of the preceding chapters), consisted of 252 items from four major sources:

(1) educational evaluation literature and evaluation models	**124**
(2) organizational effectiveness literature/studies	**29**
(3) school systems literature/studies	**51**
(4) school effectiveness literature/studies	**48**
TOTAL:	**252**

From such a review there were selected specific components of school systems that warranted, from the criteria established, their designation as quality evaluation indicators. These criteria, as explained in Chapter 2.2, consisted of tallying from the literature review of the 252 sources, the frequency, prominence and permanence of specific components in order to ascertain their degree of importance as major indicators for evaluating school systems. These components constitute the framework for the LINC model. As mentioned previously, there was no pre-judgement of what indicators might be included. A tally was kept of specific components, dimensions, indicators, or characteristics of school systems, if they appeared to a significant degree of importance in the literature review. By rating each indicator according to a five tier Likert scale (No mention, Not important, Somewhat important, Important, and Very important), the analyses resulted in the tabulation of each component by author, year and degree of importance. Each of the tabulated ratings for each component was placed on a master list to indicate the importance of each specific component according to one of the four types of sources of literature reviewed. Before displaying the total results of the accumulated data, an illustration regarding one component and one source of literature review will exemplify the outcome of such tabulations.

For example, **environment** was a component that appeared fairly frequently and prominently in the review of the literature. From one source, **Educational Evaluation Literature**, this component, **environment**, as illustrated in Tables 7.1 (a) and 7.1(b), appeared in various degrees of importance in 28 of the 140 sources studied from the 1960's, 1970's and 1980's.

TABLE 7.1(a): IMPORTANCE OF ENVIRONMENT AS COMPONENT IN THE REVIEW OF EDUCATIONAL EVALUATION LITERATURE:

	Somewhat Important	Important	Very Important	Total
ENVIRONMENT	5	12	11	28

[28 of the 140 articles pertaining to Educational Evaluation Literature/Studies (i e 20%) delineated **ENVIRONMENT** as an important component]

TABLE 7.1(b): IMPORTANCE OF ENVIRONMENT AS COMPONENT IN THE REVIEW OF EDUCATIONAL EVALUATION LITERATURE FOR SPECIFIC DECADES:

	60's	70's	80's	Total
ENVIRONMENT	4	7	17	28

17 of the 140 articles (i e 23%) depicting **ENVIRONMENT** in various degrees of IMPORTANCE, were written in the 1980's, 7 in the 1970's, and 4 in the 1960's

To further exemplify the tallying process, in another review source (Organizational Effectiveness Literature), **environment** ranked as important (8) and very important (13) in articles of the 50's (1), 6O's (2), 70's (9) and 80's (9). In total, twenty-one of the 32 articles (64%) from Organizational Effectiveness denoted environment as important or very important.

Because of the paucity of articles of the 1950's and 1960's relative to school system components, the sample for these two decades was too small to render any significant impact on the study. As a result, the final tabulations were narrowed to include articles of the 1970's and 1980's only; thereby negating the above tabulations of Tables 7.1(a) and 7.1(b) which contained articles from the 60's. Furthermore, to add credence to the

prominence of a component in each article, only those articles that rendered environment (or any other component) as important or very important were included.

As a result, the tabulation of data from the Educational Evaluation Literature of the 70's and 80's indicated that, of the **124** items analyzed (**59** from the 1970's and **65** from the 1980's), **11** of the 1970's and **9** of the 1980's depicted **environment** as either important or very important. Represented in a matrix, the data appears below in Table 7.2.

TABLE 7.2: IMPORTANCE OF ENVIRONMENT AS A COMPONENT IN REVIEW OF THE EDUCATIONAL EVALUATION LITERATURE OF THE 1970's &1980's:

Total all Articles	DECADE	IMPORTANT	VERY IMPORTANT	TOTAL
59	1970's	8	3	11
65	1980's	8	1	9
124	Totals	16	4	20

[20 articles of 124 (16%) pertaining to Educational Evaluation denoted ENVIRONMENT as important or very important].

7.2

RANKING THE COMPONENTS

The final results of the investigation of the four sources of the literature review appear in Table 7.3. While the tabulations are given in great detail, the various resulting figures and matrices are explained in order to fully appreciate why the resulting thirteen components comprise the LINC model.

Table 7.3: Tabulation of School System Components from the Review of the Literature

COMPONENTS: / LITERATURE SOURCES:	Decade	# of Articles	Goals	Environment	Leadership	Structure	Workplace	Interaction	Process	Decision-Making	Workplace	Culture	Change	Communication	Curriculum	Accountability	Politics
Education	70'S	59	17	11	7	11	6	10	13	15	4	3	7	5	6	10	4
Evaluation	80's	65	11	9	10	7	11	8	16	11	5	7	[illegible]	3	9	7	5
	Total	124	28	20	17	18	17	18	29	26	9	10	10	8	15	17	9
Organizational	70's	17	8	10	4	8	6	6	5	1	4	3	6	3	0	0	0
Effectiveness	80's	12	8	6	6	10	8	2	4	4	5	2	5	3	1	0	1
	Total	29	16	16	10	18	14	8	9	5	9	5	11	6	1	0	1
School	70's	23	12	15	6	14	8	12	8	6	6	2	6	7	1	2	0
Systems	80's	28	10	12	7	11	7	14	12	4	8	9	9	7	0	3	0
	Total	51	22	27	13	25	15	26	20	10	14	11	15	14	1	5	1
Effectove	70's	24	10	4	20	4	9	4	2	4	6	5	0	3	4	0	0
Schools	80's	24	7	11	14	4	13	7	2	9	13	6	1	3	10	0	0
	Total	48	17	15	34	8	22	11	4	13	19	11	1	6	14	0	0
Sub-Total	70's	123	47	40	37	37	29	32	28	26	20	13	19	18	11	12	4
Sub-Total	80's	129	36	38	37	32	39	31	34	28	31	24	18	16	20	10	6
TOTALS		252	83	78	74	69	68	63	62	54	51	37	37	34	31	22	10
RANK:			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

To understand the tabulation for each component listed vertically in Table 7.3, Column 1 gives the total number of articles that comprised the literature review from each of the four sources (cf.Chapter Tables) Example: for source #1 (Education Evaluation Literature), the first figures denote the number of 1970 articles (59), the second figure the number of 1980 articles (65), and the third figure the combined total for both decades (124). The interpretation is the same for each of the remaining three sources.

To understand the numbers appearing below each component in Figure 7.3., the first figure (reading vertically) in each of the four sources of the literature review, denotes the number of times the component was deemed IMPORTANT or VERY IMPORTANT in **1970** articles; for example, **Goals**: 17 (Ed.Evaluation), 8 (Organizational Effectiveness), 12 (School Systems), and 10 (Effective Schools). The second figure denotes the number of times the component was deemed IMPORTANT or VERY IMPORTANT in the articles of the **1980's**; for example, **Goals**: 11, 8, 10, and 7, respectively, and the third figure gives the combined **total for both decades**; for example, Goals: 28, 16, 22, and 17, respectively.

The last three horizontal rows give the totals for each component in the 70's, the 80's, and a combined total for both decades; that is, in the case of **Goals**: 47+36=83, Based upon the combined totals for each component (as tabulated from each vertical column), the rank, as listed horizontally at the bottom line of the chart, was determined; for example, **Goals#1**.

In the attempt to keep a balance of literature items pertaining to Effective School studies for each of the two decades (the 70's and 80's), many items of research were discarded. For example, the original tally for Effective School Literature totaled 90 articles in the ratio 13:77., i.e. 13 articles

from the 1970's and 77 from the 1980's. The writer discounted many of the 1980 articles that dealt solely with Effective Principals in order not to weigh the findings too heavily on the specific component of leadership. Comprising the review, therefore, are 24 items from the 1970's and 24 items from the 1980's on the general topic of Effective Schools.

To render the findings in a different and more direct way, Table 7.4, in contrast to Table 7.3, denotes the indicators ranked in a vertical order format of their combined IMPORTANCE for each of the two decades as well as a combined total. The same information also appears in Table 7.5 but in a more simplified and specific format and with the ranking of all components tabulated for each of the decades; viz, 1970 and 1980. The tabulated results for each component produced a combined total by which to rank each component. Where two components may have received similar totals or percentages for specific decades, their final ranking was based on their average ranking from the two decades surveyed. To further support the rank as tabulated, another ranking table based on percentages appears in Table 7.6.

TABLE 7.4

SCHOOL SYSTEM EVALUATION
Ranking the Components
(Their Permanence and Prominence)
(Search of the Literature: 70's and 80's)

Source: 1. Education Evaluation Literature
2. Systems Evaluation Literature
3. Organization Effectiveness Literature
4. Effective Schools Literature

Legend: # (number of times component was mentioned as important or very important in articles).

Rank 70's	#	80's	#	Combined 70's & 80's	#
1. Goals	47	Work Force	39	Goals	83
2.Environment	40	Environment	38	Environment	78
3.Structure	37	Leadership	37	Leadership	74
4 Leadership	37	Goals	36	Structure	69
5.Interaction	32	Process	34	Work Force	68
6 Work Force	29	Structure	32	Interaction	63
7.Process	28	Interaction	31	Process	62
8 Decision Making	26	Work Place	31	Decision Making	54
9.Work Place	20	Decision Making	28	Work Place	51
10 Adaptability	19	Culture	24	Culture	37
11.Communication	18	Curriculum	20	Communication	34
12.Culture	13	Communication	16	Adaptability	31
13.Accountability	12	**Adaptability**	12	**Curriculum**	31
14.Curricu;lum	11	Accountability	10	Accountability	22
15 Politics	4	Politics	6	Politics	10
Total#Articles=	**123**		**129**		**252**

TABLE 7.5

OVERALL RANKING OF COMPONENTS

(Total Items/Combined Rankings In Numerical Order)

SCHOOL SYSTEM EVALUATION COMPONENTS

COMPONENTS	1970's	1980's	TOTAL
1. GOALS	47	36	83
2. ENVIRONMENT	40	38	78
3. LEADERSHIP	37	37	74
4. STRUCTURE	37	32	69
5. WORK FORCE	29	39	68
6. INTERACTION	28	34	62
7. PROCESS	27	36	63
8. DECISION MAKING	26	28	54
9. WORK PLACE	20	31	51
10. CULTURE	13	24	37
11. CHANGE	19	18	37
12. COMMUNICATION	18	16	34
13. CURRICULUM	11	20	31
Totals:	123	129	252

[Other components expressed in lesser ranking order of importance included: politics, needs, students, instruction, climate, innovation, authority, control, accountability, integration, product, etc. Of all these components, none rendered any permanency in the tabulations to warrant inclusion in the model; for example, accountability, although the closest with a combined total of 22, was excluded because of its overall resemblance to the definition of evaluation. Next ,in order of importance, was "politics" (4+6=10). (SEE TABLE 7.6) Each of the others, had even smaller totals, hence lower rankings].

TABLE 7.6: RANKING COMPONENTS by PERCENTAGE

School System Evaluation Indicators/Components

	(252) Total	(123) 1970's	(129) 198[illegible]'s
1.Goal	32 9 %	38.2% (1)	27.9% (4)
2.Environment	31. 0%	32.5%(2)	29.4 %(2)
3.Leadership	29.4%	30.1% (4)*	28.7%(3)*
4.Structure	27.4%	30.1% (3)	24.8% (6)
5.Work Force	27.0%	23.6% (6)	30.2%(1)
6.Interaction	25.0%	26.0% (5)	24.0%(8)
7.Process	24.6%	22.8 %(7)	[illegible] 4 %(5)
8.Decision-Making	21.4%	21.1% (8)	21.7% (9)
9.Work Place	20.2%	16.3 %(9)	24.0 %(7)
10.Culture	14.7%	10.6% (12)	18.6%(16)
11.Change	14.7%	15.4%(10)	14.0%(12)
12.Communication	13.5%	14.6%(11)	12.4%(13)
13.Curriculum	12.3%	8.9 %(13)	15.5%(11)

*Ranking according to totals.

As a result of the two methods of ranking (i.e.by the percentages for the 70's and 80's and by the total number), a comparison of these two rankings show the fluctuation of the first five indicators during the two decades:

RANKING	1	2	3	4	5
by % 1970	Goals	Environment	Structure	Leadership	Interaction
by % 1980	Work Force	Environment	Leadership	Goals	Process
by overall (total #)	Goals	Environment	Leadership	Structure	Work Force

7.3

The LINC *interactive* Model

Introduction

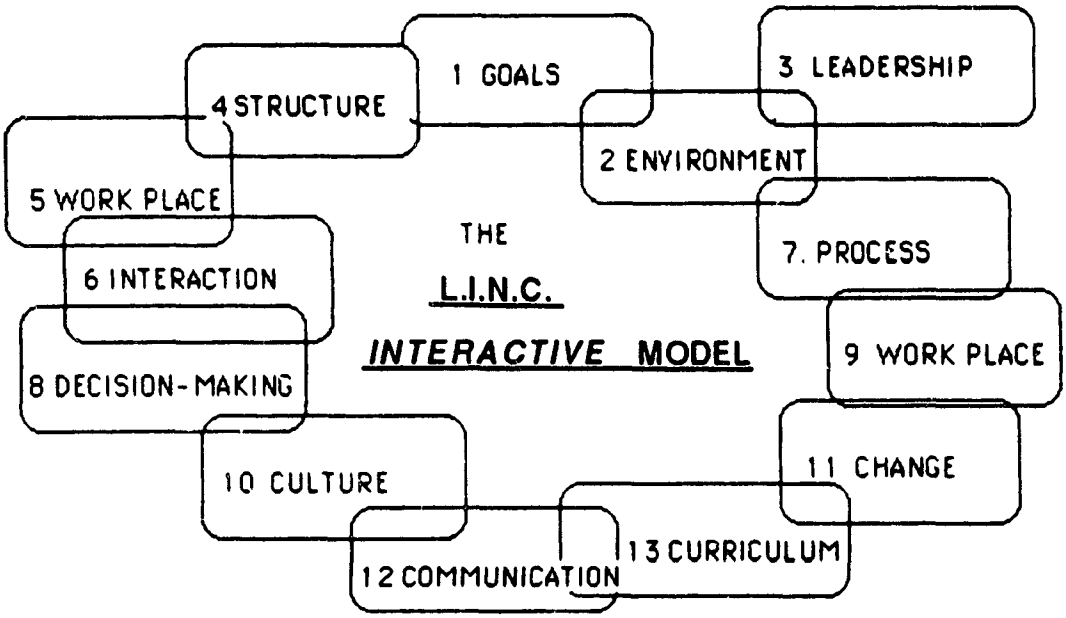
Because of the continual changes in society and organizations and in the behavior of organizational members, most of the theories developed in the last thirty years have lost their usefulness (Weiss, 1983). Many have been plagued by ill preparation, methodological inadequacies, (Harteau and Nadeau, 1985), low status, ambiguities, improper focus, inadequate time for follow-up (Weiss, 1983), and the omission of holistic, open system, and organizational effectiveness approaches. The rapid changes occuring in politics, economics, technology, and commitment to health and welfare have placed heavy demands on education today. New programs, new teaching roles, and new interests abound. Unsuitable and irrelevant are the approaches or models that often concern themselves with questions or concerns that are of no interest to audiences.

Composition

In this study, however, the review of the literature has resulted in the identification of significant school system components that have been commonly and frequently emphasized by a number of writers and theorists. The resulting tabulation and ranking of thirteen salient characteristics and components (Tables 7.4 and 7.5) helps to formulate a holistic view of school systems and constitutes the framework for a new approach to the evaluation of school systems; namely, the **LINC *Interactive* Model** (Figure 7.1). The components comprising this new approach to school system evaluation serve

as comprehensive indicators to aid in the systemic collection and interpretation of data as a part of the evaluation of school systems. The purpose of the evaluation with such a framework is not solely to render a judgement of value but also to foster new ways of action for improvement and change. These components indicate **what** to evaluate!

Figure (7.1) **The L.I.N.C. *INTERACTIVE* MODEL**



L: (L/C/D) i.e. **LEADERSHIP, COMMUNICATION, DECISION-MAKING**

I: **INTERACTION, INDIVIDUAL** (i.e., the **WORK FORCE)**

N: the **NEXUS** of all organizations.,i.e., **GOALS, ENVIRONMENT, STRUCTURE, and PROCESS.**

C: **CLIMATE** (i.e., the **WORK PLACE), CULTURE, CHANGE, and CURRICULUM**.

[The model has been named the **LINC *interactive* Model** to denote the

importance of the interconnectiveness; i.e the linking (LINC) of a chain of thirteen components. The letter "**L**" is used to denote the domain of the three essential components (L,C, and D) of the individual leader; viz. **l**eadership, **d**ecision-making, and **c**ommunication; the letter "**I**" signifies the importance of the **i**ndividual and **i**nteractiveness, the letter "**N**", the **n**exus, a connecting group of four components; viz. **goals**, **environment**, **structure**, and **process** that help to bind or join together a system, and "**C**" to denote the remaining four components, each of which begins with the letter "C"; viz. **c**limate, **c**ulture, **c**hange, and **c**urriculum].

Purposes of Components

The above educational components, as termed by David (1988) are "statistics that reflect the health of an educational system and can be readily and repeatedly collected" (p. 497). The school system components, as garnered from the literature reviews, are descriptors that point out and/or direct with more exactness, attention to particular aspects of a school system. They are used not just as variables in which data are collected and measured, but also as integral system dimensions from which one can monitor change and development in a school system (especially in a systems' inputs, processes and outputs context). They give a picture of the overall operational nature and educational planning of a school system (Johnstone, 1981).

While the resulting quality components as enumerated (Figure 7.1) in the **LINC *Interactive* Model** bear some resemblance to those devised by other researchers, the components' "weights" (rankings) vary when ranked in order according to the specific classifications of literature that were reviewed; namely, Educational Evaluation Literature, School Systems

Literature, Organizational Effectiveness literature, and Effective Schools Literature (Tables 7.3 & 7.4). As Campbell (1977) pointed out, such variances occur because different researchers, as exemplified form the data tabulated from the above four categories of the literature review, adhere to different models and lists that have been put together from different conceptual points of view. They are, in essence, the means and the ends that call for valued judgments, either implicitly of explicitly, on somebody's part. Examples of such variances by different researchers are to be found in the approaches of Likert (1967), Scott (1977), and Tuckman (1979).

Likert's ISR (Institute for Social Research) Model (1967), in assessing an effective system, used a Systems Questionnaire to measure perception of the indicators that formed an approach to school system evaluation. These indicators, coincidentally, parallel seven of the components that constitute the LINC Model; namely, (1) **leadership, (2) process, (3) communication, (4) interrelation, (5) decision-making, (6) goals, and (7) workforce.**

Scott (1977) indicated that evaluators must determine the components to be assessed. If there were more than one property, then one must determine, by the tabulation of data, their rankings or weights. This principle has been exemplified in this study by a review of the literature of the frequency, prominence, and permanence of the components. (Tables 7.3 and 7.4) that constitute the framework of the LINC model (Figure 7.1). And if standards were delineated (Provus, 1971, Stanley, 1988), then a comparison of their standing (Table 7.5) should be rendered to achieve a correct judgement of the effectiveness of each component (Etzioni, 1967).

Bruce W. Tuckman (1979) found it "convenient to separate the

educational variables we are interested in measuring, into input, process, and output" for evaluating the performance effects of programs, schools, or school districts (systems) since, as he maintained "school systems operate largely as a function of the quality of inputs" (p. 13). Using such reasoning, the thirteen components that constitute the framework of the LINC model would likely be categorized (if one were to use the basic systems model of input-process-output as a measurement and separation approach) into 'measureable educational' terms as illustrated in Table 7.7.

TABLE 7.7: 'Measurable Education"

INPUT (the givers)	PROCESS (the performers)	OUTPUTS (the receivers)
1.ENVIRONMENT (resources/technology) (adaptability/flexibility)	1.CULTURE (shared beliefs)	1. CHANGE
2.STRUCTURE (roles)	2.COMMUNICATION (feedback)	2. GOAL ACQUISITIONS (achievement,attitude) behaviour)
3.WORK PLACE (facilities)	3.PROCESSES (strategies, methods, techniques)	
4.WORK FORCE (students/teachers)	4.CURRICULUM (instruction)	
5.GOALS (operative)	5.LEADERSHIP (behavior, style, change)	
6. CURRICULUM (the program)	6.INTERACTION (interdependence, interrelatedness)	
	7.DECISION MAKING (empowerment)	

Moreover, in the theories expounded by Michael Scriven and Michael Provus,such indicators/components are also used to draw attention to both intended and unintended consequences, goals or intentions. As a doctor uses an X-ray, a skilled evaluator uses quality indicators to reveal

strengths and weaknesses. These components, in themselves, spawn a number of variables which, when combined, produce a single value and/or interpretation. From that interpretation, "an evaluation can be made of the overall level of that conceptual part of the educational system" (Johnstone, 1978, p. 255). For example, if the component is the **work force**, statistical data relating to promotion, tenure, absenteeism, motivation, satisfaction, morale, etc., can render a comprehensive overview and evaluation of that component. Consequently, an indicator like motivation, while recognized as a descriptor of the individuals in the work force, is not classified as a main component itself, but like a system, is a sub-unit of the major variables **work force** and **work place**. Such indicators of a school system, as derived in this research study, are necessary in obtaining a gestalt, a united, unified whole configuration of the total system.

The *Interactive* Element

The **LINC *interactive* Model** is an analytical investigation of a school system with the emphasis being on the system and how its thirteen systemic components work interdependently to achieve designated goals, thus explicating the interrelatedness and interaction of these sub-units to themselves and the whole school system.

The **LINC interactive Model** comprises thirteen interactive elements--not just a compendium of individual components in isolation -- that, if used in the context of their inter-relationships, interdependencies, and their interactions, are capable of giving a unified evaluation. The holistic phenomena of school system evaluation emphasizes the understanding of the system as a whole and not as a loose collection of variables. Such is the true

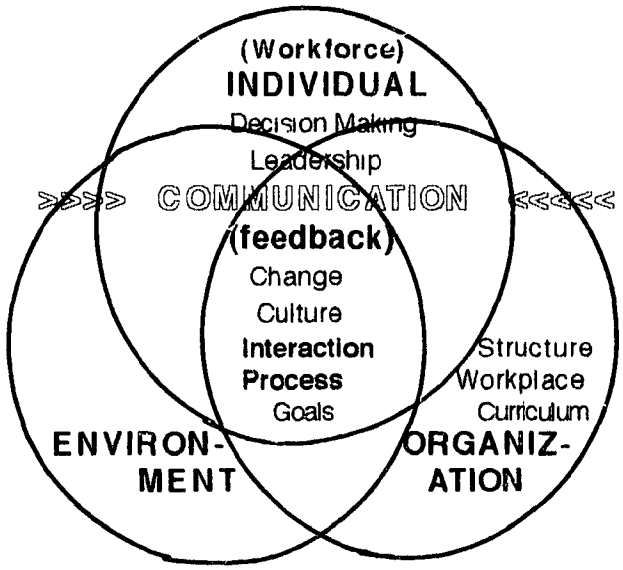
objective of a school system evaluation in that a school district is considered a total organism that succeeds or fails as a result of the efficient or inefficient functioning of each of its parts. The measurement of the interactive segments of these components should result in a holistic system-wide evaluation which may help to evaluate the effectiveness, efficiency, economy, and excellence not only of each component individually but also of the components collectively. It is not only the singleness of effect that must be considered in evaluating these thirteen school system components, but also the complexities that link each of them and gives a more unique approach to school systems evaluation. For an evaluation to be interesting, functional, meaningful, purposeful and relevant, the approach must be holistic ... not broken into parts and pieces ... not taken out of context, but appraising the interaction of all relevant components of a school system and, more particularly, of an open system dependent on its **environment** and characterized by its **workforce** (individuals) and an **organizational** milieu.

The LINC model embodies the definition of a school system: **an organization operating effectively as a collective entity of its interdependent and <u>interactive components</u>.** Furthermore, the model manifests the systemic cross component involvement of a school system--especially its dependency on **the environment, the individual, and the organization**. A school system is bounded by its environment; an individual's interaction creates his/her own relationships within and without the system. This interaction between the environment and the individual creates a set of values and practices that are affected by the organization. What goes on inside the system is a function of what goes on outside and vice versa. Any of the major components of a school system interact: its

technology, goals, environment, workforce, structure, etc. [Katz and Kahn, 1966; Chodak, 1973; Hayman, 1975; Gorham,1975; Steers, 1977; Pennings & Goodman, 1977; Cummings,1980; Kalatimo & Steeman, 1980.

The thirteen components that comprise the LINC interactive model can also be arranged in a format to illustrate this systemic cross component interaction. Figure 7.2 consists of three concentric circles (intersecting sets) that (1) illustrate the specific domains of a school systems evaluation in the mode of an **environment-individual-organizational** framework, and (2) demonstrate the cyclical aspect and importance of communication (feedback) as illustrated by the arrows intersecting the domains of the three sets.

igure 7.2: Interaction and Interrelationships of The LINC *interactive* Model and its 13 Components



The Environment <-> The Individual <-> The Organization

Advocated in this study, therefore, is a comprehensive evaluation of the three domains of the major components that constitute a school system

and of how their interdependence influences the quality of education. Although some theorists acknowledge that school districts are the sum of many different and separate individual parts (Stufflebeam and Shenfield, 1985), they neglect the systemic **interactions and interrelationships** of school system components that comprise the dynamic and complex world of school systems. Hoy and Miskel's (1987) dictum is "that other things being equal, the greater the degree of congruence among the elements of the system, the more efficient the system" (p. 70). A school system succeeds or fails on the collective efficient or inefficient functioning of its varied components. The set of open systems components and their **function, interaction and congruence** -- so relevant to school systems evaluation -- has no relevance in the approach of evaluation theorists.

Rationale of the LINC *interactive* Model

The **LINC *interactive* Model** of thirteen salient components recognizes the complexities and unique properties of school systems and the need for an evaluative response to each component and its interaction. Edward A. Suchman posited in his "Scientific Approach to Education" (as cited in Stufflebeam and Shinkfield, 1985) that the prevalent error made by evaluators was performing segmented assessments rather than a global appraisal of a school system. The **LINC *interactive* Model** is based on the postulate that school systems must be viewed globally and that all parts should coordinate with each other. The component parts must be consciously integrated with one another and with other areas to depict a global view of the system. The purpose in evaluating each of the thirteen components and their interaction with each other is to enhance and strengthen a school system

whereby the quality of education and hence the performance of students can be improved. Therefore, the LINC model, in relation to the four major definitions of evaluation (as explicated in Chapter III), should be able to:

(1) describe the condition of the system; that is, to give a picture of its quality and performance, ***(GOAL ATTAINMENT)***

(2) assess its strengths and weaknesses, ***(JUDGEMENTAL)***

(3) provide information re current and future trends that can be used for decision-making and change, ***(DECISION-MAKING INFO)***

(4) foster leadership and cooperation, through collegial and collaborative efforts among stakeholders that will promote improvement through recommendations. ***(IMPROVEMENT)***

The model, therefore, is a measure of the extent to which each component, through its interaction, has attained a desired result. Furthermore, the process examines the efficiency and adequacy of processes, suggests new approaches, establishes priorities, provides public accountability, and builds moral and critical attitudes of staff by involving them in the evaluation. Empirical studies have repeatedly recommended a collaborative approach to local evaluation efforts; that is, in having evaluators, decision-makers, and stakeholders working together to share and <u>use</u> educational evaluation information.

In Chapter VIII, each evaluation component is defined, classified, explained, and analyzed separately, its significance and function given, and pertinent characteristics outlined that are relative to its meaning and focus. Moreover, criteria and procedure for the evaluation of each component is suggested at the end of the analysis of each component. Applications of the **LINC *interactive* Model** in three Nova Scotia school

reviews, as revealed in Chapter IX, test the various components of the models and their interactive quality. An evaluator, by observation, data collection, and the guidelines outlined, should be able to use each of the thirteen indicators of the **LINC *interactive* Model** to describe, interpret, and judge school systems.

7.4

The Contributions of the Models of the Five Leading Theorists to the LINC *interactive* Model and to School System Evaluation

Philosophically speaking, all five theorists have something to offer to school system evaluations. As specifically alluded to in the analysis of each of the models of the five theorists (particularly in discussing the strengths of each approach), their major contribution lies in their specific methodologies that can be applied to any evaluation. For example, one would agree that evaluations should be cognizant of discrepancies (Provus), that intended goals may often be less important than unintended ones (Scriven), and that the art of teaching is an all important aspect of any school system (Eisner). It is by such methodological approaches that the five theorists and their five models do have important applications for school systems evaluation. In examining each of their approaches, the following contributions of each theorist are noteworthy. Each of the models indicate particularly how their methodologies, frameworks, and principles can enhance the techniques of an evaluaor.

(1) STUFFLEBEAM/THE CIPP MODEL: While the words of the acronym C.I.P.P. bear little resemblance (other than in name) to school system evaluation, Ingram and Miklos' (1980) application of the CIPP model presents a systemic view of the operation of a school district and parallels the

LINC *interactive* Model in that some of the components it analyzes under each of the criteria are similar; namely, environment (context), goals (input), management (process), and goal attainment (product). Edward J. Ambry (1979), who used the Stufflebeam approach in his evaluation for environmental education, also classified the CIPP model as being close to a systems approach. As a result, the CIPP model may seem, therefore, more in line with a system's view of education and human resources (Stufflebeam and Shenfield, 1985). Yet, while the four criteria can be transposed into a systemic view of a school district, they make no specific mention of the various other components of school systems as extrapolated in this study.

(2) Provus/The Discrepancy Evaluation Model: Like the CIPP approach to evaluation, Provus' design also follows the basic system theory concept of input, process and output in its framework of standards, performance, and comparison. Provus' (1972) major contribution is an organizational paradigm that emphasizes a feedback loop (common in systems theory) -- a process that fosters continual information to clients regarding the discrepancies between performance and standards or, as Wiles & Bondi (1993) emphasized, the "means of regularly assessing programs and taking corrective action when findings are unsatisfactory" (p. 237). For an assessment to be important, Provus was adamant that there could not be an evaluation without discrepancy information. The basic methodology of the DEM model -- to search out discrepancies -- is a major contributing and fundamental principle that must be followed in any school system's evaluation.

(3) Stake/Countenance-Responsive Model: This model is seen as the genesis of the stakeholder's approach to educational evaluation. In fact, it is often termed the pioneer of client-centered studies.

The evaluator must work with and for the support of educators and the community by reporting for a wide range of clients, each having different perspectives in our modern pluralistic society (Stufflebeam and Shinkfield, 1985). Guba and Lincoln (1982) distinguish Stake's model as one that "takes as its organizers the concerns and issues of stakeholding audiences" (p. 24). Wentling (1980) underscores the lack of planning in evaluation and the lack of evaluation integration and participation by its stakeholders. Responsive evaluation assumes that intentions change; hence, it calls for continuous feedback (communication) between the evaluator and his/her audience. The emphasis is, therefore, firmly placed on feedback (**communication**) and dissemination from an array of groups in an attempt to shape a realistic, relevant, usable, cohesive package; that is, a stakeholder-oriented evaluation (Weiss, 1986)).

One of the major contributions of Stake's model to school system evaluation today can be seen in its pluralistic, flexible, subjective and service oriented approach to educational evaluation (Stufflebeam and Shenfield, 1985). The approach has become extremely useful for obtaining cooperation from administrators, pressure groups, and the public as a whole; however, the increased personal interactions become both its strengths and its weaknesses.

The chief advantage of the countenance-responsive evaluation is the constant feedback between the evaluator and the stakeholder. The model is responsive to the needs of the audience and allows questions to emerge, to be identified, and to present a finding to the client. Furthermore, it mirrors such present-day educational philosophies as collaborative decision-making and on-site management (Alexandruck, 1982) The selection of an evaluation,

as the Countenance-Responsive model, enhances a partnership among school authorities, government educational officers, and the community. Such a joint effort ensures a contextual parallelism of philosophy and process that permeates throughout the evaluation.

(4) **Scriven/The Goal Free Evaluation (GFE)**: No one can totally discount or discredit Scriven's major evaluation principle of looking for unintended side effects. The two distinct advantages of the GFE approach are: (1) the gathering of information, holistically and inductively, about all worthy effects and (2) the determination of the relative importance of these various effects in comparison to what was intended. (Harlen, 1976). Such a methodological process may often disclose information that is very vital to a school system. Analyzing the unanticipated outcomes and comparing those outcomes against a standard helps to provide important information for formative or summative evaluations.

Scriven's major contribution to educational evaluation lies in his conceptualization of these two distinct roles of evaluation: **formative** (to improve or refine) and **summative** (to judge). The purpose of evaluation expounded in this study; namely, that evaluation must be for improvement, exemplifies Scriven's formative approach to education.

(5) **Eisner/The Criticism & Connossieurship Model**: Eisner underscores the value of an expert evaluator. Eisner's major credo is that an evaluation process must be directed by an individual(s) with expertise -- a connoisseurship of criticism!

Provus (1967), Stake (1967), Guba (1969) and Grobman (1970) all stress the need for an evaluator with the expertise to describe, interpret standards, assess performance, and judge. In their summation of the

evaluation study of Wheatland, Alberta (1987-88), Newton and MacKinnon (1990) emphasize the importance of an external and credible professional evaluator who can lead and collaborate in a school system evaluation and take responsibility for directing every facet of the educational audit or assessment. Eisner, as did Stufflebeam (1974,) emphasized the need for evaluators to heed all the standards of evaluation; that is, that their evaluations have technical adequacy, reliability, validity, and practicality, be unbiased, and cost effective, and promote ethical practices (protection of rights, privacy, legality, etc.). Eisner also posited that evaluations must be subjectively, not objectively, measured (Koppelman, 1979).

Of particular interest in developing a framework for evaluating school systems is Eisner's perception that the whole must be conceptualized first, and the problems of differentiation considered later. Eisner insisted that the objects must be viewed and evaluated holistically. They cannot be broken down in artificial ways. Evaluation, he posits, cannot be a brick by brick approach because the artist finds it constantly useful to consider the relationship between the whole and part in order to create some sense of organic quality in a work. In organizations, as in curriculum, the breaking up of complex tasks into small, isolated, and independent micro units renders the operation useless or, as Eisner (1979) posits: "I must, at least, have some sense of the whole in order to know where things belong and how they function" (p. IX). That philosophy is indeed inculcated in the conceptualization of the **LINC *interactive* Model**.

Eisner (1979) creatively sought to foster improvement in classroom instruction by inculcating new approaches to the educational evaluation of the art of teaching. For example, he was among the first

evaluator to advocate the use of videotapes, films, meaningful written reports, reflective teaching, and artistic forms, such as the emotionalization of language when reporting on teacher and student practices (Eisner, 1985).

7.5

A Comparison of Each of the Five Leading Theorists with Each of the Thirteen Components of the LINC *interactive* Model

The third and last major purpose of this chapter is to specifically delineate the mismatch between the five models and the thirteen components that comprise the **LINC *interactive* model** for evaluating school systems. If educational evaluation is a process of identifiable components (Cangelosi,1991), which ones are not identified by these five theorists that show some weaknesses for evaluating school systems? A detailed comparison is given in Table 7.8 between each component of the **LINC *interactive* model** and each of the five models of the five leading theorists.

Table 7.1: **A Comparison of the Components of**

The LINC *interactive* Model
&
The Five Theorists' Models

1. GOALS
(The objectives, mission statement, purposes of the organization)

A STUFFLEBEAM (C.I.P.P.)	B PROVUS (DEM)	C STAKE (Responsive/ Countenance)	D SCRIVEN (Goal Free)	E EISNER (Connoisseurship Criticism)
Yes. The four distinct elements of CIPP can be structured according to Context (goal identification), Input (goal appraisal), Process (goal implementation), Product outcomes).	**Yes**, goal oriented and quite applicable for assessing goals; e.g., comparing system goals with school goals in order to ascertain their alignment or discrepancies.	**No**, goals and objectives are of less importance than concerns of and the effects upon stakeholders. Goals are viewed from an unintentional perspective --not for goal attainment purposes.	**No**, the emphasis is more on meeting needs and side effects rather than measuring goal attainment. Goals are seen as unimportant and irrelevant, in comparison to unintended or unanticipated side effects, which are seen as critical; comsquently, all effects are gathered and determined in the evaluation.	**No**, a natural model concerned with programs & individuals. Eisner saw no point in starting with goals & then deductively proceeding to evaluation because, to him, evaluation was the practical insight into the realities & experiences of the classroom. not for the setting and assessing of goals.

2 .ENVIRONMENT
(the external surroundings/the community)

A STUFFLEBEAM (C.I.P.P.)	B PROVUS (DEM)	C STAKE (Responsive/ Countenance)	D SCRIVEN (Goal Free)	E EISNER (Connoisseurship Criticism)
Yes, when used in the context of resource acquisition; i.e., as an evaluation variable that assumes acquisition from environmental sources; e.g., input (teachers finances, students). Its major purpose is to provide information for the decision - maker (administrator) -- not for stakeholders or community.	**Yes**, involves stakeholders (community) but only to verify the "product" evaluations through environmental responses.	**Yes**, model is the genesis of the stakeholder approach; i.e., increasing the input of individuals at all levels (internal and external) in the evaluation process -- their concerns and issues. All in all, the model emphasizes community-environmental involvement, which determines to a considerable degree the framework of the evaluation. He takes the concerns and issues of stakeholders and makes members of the community part of the process.	**Yes**, but only as a means of stakeholders' response directing the evaluation in order to judge the worth of something; for example, usually the retaining, altering, or removing of a consumer good.	**Yes**, but concerned solely with the internal environment --namely, the classroom. Yet, he was interested in the communi -ty's opinion re programs, teaching, and student outcomes, not to the degree of Stake, but in making reports were written so that they were understood by the community. He wanted to illuminate aspects of the school system to help audiences appreciate the finely developed insights of experts who can provide useful info.

3. LEADERSHIP
(management)

A STUFFLEBEAM (C.I.P.P.)	B PROVUS (DEM)	C STAKE (Responsive/ Countenance)	D SCRIVEN (Goal Free)	E EISNER (Connoisseurship Criticism)
Yes, but only in regard to decision making; i.e. to provide data to guide decision-makers in choosing alternatives. CIPP is an instrument by which decision makers can initiate the improvement of programs.	Yes, but only in decision making. DEM is designed to provide information for decision makers independent of the evaluator (unlike CIPP).	No, leader-ship and decision - making can prove unwieldly in its democratic processes. Adapability also may conflict with various interest groups.	Yes, but only in its approach to evaluation; that is, in its objective to improve and change current practices.	No, its purpose is to illuminate what does exist. What is to be done is for others to decide.

4. STRUCTURE
(the organizational role chart)

A STUFFLEBEAM (C.I.P.P.)	B PROVUS (DEM)	C STAKE (Responsive/ Countenance)	D SCRIVEN (Goal Free)	E EISNER (Connoisseurship Criticism)
N/A	N/A the basic principle is easily adaptable (e.g. noting a discrepancy in a particular role).	N/A	N/A	N/A Alluded to only in relation to classroom manage-ment and design -- not to organiz-ational structure!

5. THE WORK FORCE
(the individual employee)

A STUFFLEBEAM (C.I.P.P.)	B PROVUS (DEM)	C STAKE (Responsive/ Countenance)	D SCRIVEN (Goal Free)	E EISNER (Connoisseurship Criticism)
No product-oriented.	**No** product-oriented.	**No**, but formative/ summative roles of evaluation have been adapted to evaluating responses of personnel--[stakeholders] ... especially in the application of the clinical supervision model.	**No**, product oriented.	**Yes**, one major aspect is the evaluation of the individual, or in Eisner's case, the evaluation of instruction The art of teaching, the quality of instruction, & classroom manage-ment are his major concerns.

6. INTERACTION
(interdependency & interrelatedness of sub-units)

A STUFFLEBEAM (C.I.P.P.)	B PROVUS (DEM)	C STAKE (Responsive/ Countenance)	D SCRIVEN (Goal Free)	E EISNER (Connoisseurship Criticism
No Although the four components can be cyclical and hence interactive,	**No**, Only among individuals involved in discerning discrepancies in standards not among any	**Yes**, but with stakeholders only, especially interpersonal relations, not of components ... 'observe and react [not inter-	**Yes**, but of clients who are consumer-oriented	**Yes**, Eisner definitively acknowl-edges the importance of the whole as a concept -ualization

too often each element of the model is performed separately -- losing any holistic or interactive approach.	components!	act] is the credo.	of ..any parts .. i.e. interrelationships between various parts of the whole system. Eisner, applied such a concept to the interaction between three components in a school; viz., instruction, curriculum and teaching. The processes of the model [DIE] are, in themselves, three interrelated components; namely, description, interpretation, and evaluation.

7. PROCESS
(system transactions)

A	B	C	D	E
STUFFLEBEAM (C.I.P.P.)	PROVUS (DEM)	STAKE (Responsive/ Countenance)	SCRIVEN (Goal Free)	EISNER (Connoisseurship Criticism)
Yes, one of 4 components of CIPP is	**Yes**, in its process of comparing	**Yes**, but only as a phase of the evaluation.	**Yes**, but concerned with effects	**Yes**, but a three-fold process of

process which focuses on discerning procedural patterns and defects in implementing programs. More often, however, the model is purely a description of progress... of delineating, obtaining, and providing information for judging decision alternatives [CIPP is not an evaluation of identifiable components!]	performance and standard i.e. a process of detecting a difference or a noted discrepancy between input (standard) and output (performance).	Often denoted as"transaction"; that is, a succession of processes. The model is a co-operative endeavour that deals with the unintended practices and processes observed within the school system.	as cost, needs, assessments, comparisons, and judgements of programs, projects,and products. GFE is a carefully designed process that is systematically conducted to include variables more aligned with product, program, or an individual of a school -- not of a school system.	describing, interpreting, and judging classroom management and instructional skills; e.g. allowing teachers to see what they do; i.e. "the art of teaching." All in all, the model is a critical appraisal by an evaluation expert. The process applies only to program/ presentation -- not to the evaluation of a school system.

8. Decision-Making
(Rational/administrative model: Identify, Develop, Elect, Activate)

A STUFFLEBEAM (C.I.P.P.)	B PROVUS (DEM)	C STAKE (Responsive/ Countenance)	D SCRIVEN (Goal Free)	E EISNER (Connoisseurship Criticism)
Yes, the very purpose of the model is to provide information by which administrators can choose	**No**, the most critical aspect is the lack of decision-making re evaluating goals and the inability to set	**No**, often unwieldly because of the large number of stakeholders involved in the decision-making	**Yes**, especially when used for formative and/ summative evaluation - for improvement, termination, or change of	**No**, the purpose is to illuminate what does exist and is to be done. It is left up to others to

alternatives and make rational decisions re improvements of facilities, instruction, and programs.	adequate standards. Unlike CIPP, the model is designed to provide information for decision - makers independent of the evaluator.	process.	current practices	decide. For example, the model provides a sense of how curriculum decisions must be made in particular situations (declining enrolments) under specific influences (court decisions), and with particular sources (experts)

9. WORK PLACE (climate)

A STUFFLEBEAM (C.I.P.P.)	B PROVUS (DEM)	C STAKE (Responsive/ Countenance)	D SCRIVEN (Goal Free) Oriented	E EISNER (Connoisseurship Criticism)
No	**No**	**No**	**No**	**Yes**, extremely significant, but applied solely to the evaluation of (1) the classroom, which Eisner posits as the milieu designed to give a better

understand-
ing of
teaching as
an art
and (2) the
particular
curriculum
situations
that
influence it

10. CULTURE
(shared assumptions, norms, ideas)

A STUFFLEBEAM (C.I.P.P.)	B PROVUS (DEM)	C STAKE (Responsive/ Countenance)	D SCRIVEN (Goal Free)	E EISNER (Connoisseurship Criticism)
N/A	N/A	N/A	N/A	**Yes**, Eisner acknowledges the importance of culture functioning as an organic entity that seeks stability, yet leads to interrelated changes in schools.

11. CHANGE
(adaptability)

A STUFFLEBEAM (C.I.P.P.)	B PROVUS (DEM)	C STAKE (Responsive/ Countenance)	D SCRIVEN (Goal Free)	E EISNER (Connoisseurship Criticism)
N/A	N/A	**Yes**, sensitive, to change --- particularly to	**No**, but does apply to the formative	**Yes**, to the many vicissitudes

		the views of stakeholders	and summative approaches to environment. evaluation (a delineated by Scriven) where the purposes are improvement and termination respectively.	of instruction and of the classroom environment

12. COMMUNICATION
(feedback)

A STUFFLEBEAM (C.I.P.P.)	B PROVUS (DEM)	C STAKE (Responsive/ Countenance)	D SCRIVEN (Goal Free)	E EISNER (Connoisseurship Criticism)
No ignores feedback.	**Yes**, very important for the understanding and discerning of a discrepancy	**Yes**, calls for constant and continuous communication and response between evaluator and his/her audience. Feedback is essential.	**Yes**, calls for feedback in a producer and consumer network regarding the utility of the product (usually divorced from educator participation).	**Yes**, but confined to the internal environment (classroom) and to the supervision of instruction .. and only to professional clients

13. CURRICULUM
(the school program)

A STUFFLEBEAM (C.I.P.P.)	B PROVUS (DEM)	C STAKE (Responsive/ Countenance)	D SCRIVEN (Goal Free)	E EISNER (Connoisseurship Criticism)
Yes designed chiefly to	**No** designed for evaluating	**Yes**, focus is on program but oriented	**No**, product based... extremely	**Yes**, in part designed to evaluate

A STUFFLEBEAM (C.I.P.P.)	B PROVUS (DEM)	C STAKE (Responsive/ Countenance)	D SCRIVEN (Goal Free)	E EISNER (Connoisseurship Criticism
evaluate compensatory programs and projects ("curriculum packages') and to initiate, sustain, or abort the program or project.	consumer goods (objects), cost, etc.	to program activities (usually innovative ones) and not program intents. Success or failure of program is evaluated from stakeholder perspective. The thirteen categories (clients. data, functions, etc.) all allude to program evaluation -- not to system components.	consumer oriented to standards, costs, and utility of various objects... although may be oriented to curriculum programs.	program and instruction, (illuminating the art of teaching & revealing classroom realities.But programs & curriculum are the prime subj-ects that warrant attention. To Eisner, the "right" curric-ulum would develop cognitive processes, promote problem solving, exercise intellectual factors, foster growth, and be relevant. Art should top the list in such forms as music, creative drama, group singing, and interaction.

7.6

A New Perspective in Evaluating School Systems

Cameron and Whitten (1983), in comparing the multiple models that have arisen in educational evaluation, asked the following question: What prescriptions or guidelines for improving success are suggested by your approach? While the very interactive and holistic nature of the **LINC *interactive* Model** provides one answer, it is in the **judging** of each **component**, their **congruence**, and their **interaction** that the new approach towards school system evaluation, the **LINC *interactive* Model**, offers a new perspective.

Judging a Component

One question frequently asked by students is: How do you judge a component? For example, how would you assess the **culture** of a school or school system. What would you look at or look for? For this purpose, a comprehensive analysis of each domain (L-I-N-C) and its components is detailed in Chapter VIII. Also provided (at the conclusion of the explication of each component) is an evaluation guide (checklist) for evaluating each of the thirteen components. Both the specific explanations and evaluation guides for each of the thirteen components provide a working framework for any potential evaluator of a school system. An important similarity in each of these guides is the continual attention given to the significance of the interaction of the components --- to the importance of judging the effect of each component on the whole school system.

Judging the "Whole" -- Congruence [i.e.,The "FIT"]

Organizations are most effective when their major components are congruent with each other. Open social system proponents argue that congruence is the only criterion by which an organization can be judged. Simply expressed, congruency is a concept of fit. The greater the degree of congruence among components, the more effective the system.

Organizational effectiveness theorists Mohr (1971) and Pennings (1975) assert that the evaluation of the effectiveness of a social system is a function of fit between organizational structure, technology, and environment. Mott (1972), Steer (1977), and Ratsoy (1983) would agree with such a statement, but would also add management (leadership) and the workforce (employees) as two other necessary components for ascertaining effectiveness. The concept of "fit", as an appropriate strategy for evaluating school systems, allows for broader criteria to determine whether a system is functioning satisfactorily over a period of time. And the criteria, comprising the list of thirteen systems components enumerated in this study, would be to judge the congruence of component(s) with the other component(s). Congruence depends on their joint functioning; that is, on their **interaction.** For example, Katz and Kahn (1966) posited that the congruency of system efficiency and political effectiveness should be the major concern of systems evaluation. The closer these two ratios approximate, the greater was the survival and growth of the organization. "Other things being equal", state Hoy & Miskell (1987), "the greater the degree of congruence among the elements of the system, the more effective the system" (p. 70).

One easy test to exemplify congruence in any school system is to ascertain whether or not the goals (vision and mission) of a system permeate

every component of the **LINC *interactive* Model.** For example, is the mission statement of the school system evident in its culture, articulated by its workforce, exemplified in its structure, felt in its climate, and presented in the curriculum?

Judging Interaction

A caveat in the evaluation process has been to look, as in usual appraisals, at system components as separate, isolated entities, and not in the broader sense of their interdependence and inter-relatedness. The focus of the **LINC *interactive* Model** is the totality of system. The model looks at the whole system when evaluating any component (its rationale, strengths, weaknesses, etc.), and renders a total appraisal of the school system, that is, a global (holistic) assessment of the whole system. The true objective of a school system evaluation must be a consideration of the total organism that succeeds or fails as a result of the efficient and effective functioning of each of its varied parts towards a whole (Hoy and Miskel, 1987). By determining the extent to which each component achieves a desired result not only within itself but also with others, the strengths and weaknesses of the school system can be truly examined (Stufflebeam & Shinkfield, 1985). Evaluations of school districts in Nova Scotia have ignored any evaluation of the interaction of various components.

Summary

This chapter has focussed on the development of a new approach to evaluating school systems by the creation of a new model, the **LINC *interactive* Model**, comprising thirteen school system components.

Throughout the chapter, these components, as derived from an analysis of the data collected and tabulated from a review of the literature, have bee reprised in many different applications and depicted in many different concepts. Their interrelatedness and interactive aspects have been illustrated in the many references already made to the cross-interdependendency of school systems, especially **the environment-individual-organization** interaction format of the **LINC *interactive* model.**

The chapter has also dealt with two other purposes: (a) the contributions of the five theorists/models, and (b) a comparison of each of the five models with each of the thirteen components of the **LINC *interactiv*e Model**.

In retrospect, the weaknesses of the theoretical models, in contrast with a systemic evaluation approach to school district evaluation as given by the **LINC *interactive* Model**, lies in the latter's new systemic persuasion encompassing a holistic concept based on the thirteen salient components derived from a review of recent research. The framework of the **LINC *interactive* Model** utilizes systemic components of school systems that include: (1) **goals** (referred to in present educational literature as "vision", "mission", or "purpose"); (2) **environment** -- its uncertainty, complexity, and technology within its boundaries and networks; (3) **the interdependence, interaction and interrelatedness** of its parts (i.e., the concept being that the whole is greater than the sum of its parts); (4) **leadership**, (5) **communication** (**feedback** mechanisms), (6) **decision-making**, (7) **structure**, (8) employee/employer behavior/entropy in the **workforce**, (9)**workplace**, (10) **culture**, (11) **change** (12) **processes**, and (13) **program (curriculum).**

This new perspective of evaluating school systems through an **interactive** and **holistic** process of thirteen research-based components, readily substantiates that school system evaluation under the **LINC** ***interactive*** **Model** (unlike the models of the five theorists) is conducted with due concern for :

(1) the specific components and characteristics of school systems (e.g., environment, structure, communication, change, goals, process, culture, interdependence, etc.),

(2) the language of organizational behavior and development (e.g. "boundary", "feedback", "homeostatis", "network", "input", "integration", "empowerment", "accountability", "Theory Z", etc.),

(3) the interrelationship philosophies (i.e., viewing the organization in terms of relationships between people and things and not just as an aggregation of people and things,

(4) a holistic systemic approach; that is, thinking of the wholeness properties of an organization; viz. recognizing that the relevant organizational factors as **climate, culture, change** and, in particular, **environment** are significant components for the evaluation of school systems in that they collectively and interactively provide a major determinant of a school system's effectiveness and efficiency (Fisher, 1988).

CHAPTER VIII

USING THE LINC *interactive* MODEL TO EVALUATE SCHOOL SYSTEMS

Introduction

Having conceptualized the **LINC *interactive*** model (Chapter 7), two additional purposes remain to be undertaken in this and the following chapter. Firstly, in this chapter, each of the thirteen components of the **LINC *interactive* Model**, under four collective headings [i.e., the "L", "I", "N", and "C" as illustrated and detailed in Figure 8.1], will be analyzed according to an evaluation format (1-4) that includes its (1) definition, (2) significance, (3) classification [where applicable], and (4) pertinent characteristics. Secondly, in the following chapter, the **LINC *interactive* Model** will be applied to selected evaluations of Nova Scotia School Systems conducted between 1978-1991.

Figure 8.1: Four Domains & Components of The Linc *Interactive* MODEL:

L: (L/C/D) = LEADERSHIP, COMMUNICATION, DECISION-MAKING [3]

I: INTERACTION, INDIVIDUAL (i.e., the WORK FORCE) [2]

N: the **NEXUS** of all organizations; i.e.,
GOALS, ENVIRONMENT, STRUCTURE, and PROCESS. [3]

C: the C's of CLIMATE [i.e., the WORK PLACE], CULTURE, CHANGE, and CURRICULUM]. [4]

In addition to the above evaluation format, an evaluation guide (checklist) for each of the thirteen components of the **LINC *interactive* Model** is to be found in the appendices. These processes for evaluating the "L" collective components of the **LINC *interactive* Model** begin in sections 8.1 - 8.3 below. Ensuing sections elaborate upon the evaluation of each of

the other three collective typologies of Figure 8.1; i.e., the "I" (Sections 8.4 - 8.5), "N" (Sections 8.6-8.9), and "C" (Section 8.10-8.13) divisions of the **LINC *interactive* Model** for school system evaluation.

The 'L' of the LINC *Interactive* MODEL
L/C/D: LEADERSHIP, COMMUNICATION, DECISION-MAKING

8.1
Leadership

1. Definition

Leadership is defined and differentiated as the ability to lead (to guide or direct) and to manage (to have charge of) [The Random House Dictionary, Revised Edition, 1988].

2. Significance

Leadership is the most studied topic of organizations. Of the multiplicity of effective schools studies relating to qualities that account for success in schools, leadership has been ranked at the top of all lists (Clark, Lotto and McCarthy,1988; Reinhan & Reinhan,1984; Mortimer & Sammons,1987; Davis and Thomas,1989).

3. Classifications:

Classifications of leadership abound and depend on the perspective given (Zirlel & Greenwood, 1981). In the **LINC *interactive* Model**, leadership is operationally defined by the dichotomous definition of leadership (managing vs. leading) which has resulted in many major and varied classifications of

leadership. They are::

(a) *Task Oriented vs Individual Oriented (Instrumental) Style or Behavior:*

Fielder's (1967) contingency model focuses on two aspects of leadership: style (personality) and behavior (directing). The leadership style refers to informal traits that individually characterize a leader whereas leadership behavior refers to specific tasks and acts of a leader in directing others. House's (1971) path-goal model emphasizes situational favourableness and task/individual orientations as means of achieving effective subordinate performances (Eastman, 1990). Kotter (1982) and Lawson (1988) concluded that success in leadership stemmed from the instrumental way leaders deal with information and people and, in particular, their ability to spend vast amounts of time motivating their workforce. Instrumental leaders are people-motivators ... constantly striving for adaptation and change (Hoy & Miskel, 1987).

(b) *Managerial vs. Instructional:*

Many researchers have advocated that the most important function of a principal is administrative leadership in instruction -- not the expertise in the content and process skills unique to each subject, but being knowledgeable about general teaching and learning matters (Emmer and Evertson, 1981; Greenfield, 1987; Purkey & Smith, 1983; Waldron, 1983; De Bevoise, 1984; Wilson & Firestone, 1987; Andrews, 1986; Wilson, 1990; Canady & Hotchkiss, 1989).

Conversely, other studies have claimed that the managerial function of leadership was the most important (Manasse, 1982; Howell, 1981; Rollis, 1986; Murphy, 1987; Montgomery, McIntosh & Matheson, 1988), that

managerial and instructional leadership should exist simultaneously (DuFour and Eaker, 1987) or be shared by an associate principal (Jesse, 1989).

(c) ***Assertive vs. Visionary*** :

A Phi Delta Kappa study (1975) concluded (as did New York, Maryland and Michigan studies and researchers, Weber, 1971; Edmunds, 1979; Little, 1980; Shoemaker & Fraser, 1981; Cohen, 1982; Fletcher, 1986; Kohmoto, 1987) that assertive leadership, characterized by such leadership traits as being in charge, assuming full responsibility, taking immediate action, exercising decisive procedures and actions, delegating and rewarding, was the highest performance indicator in developing effective schools. Rutherford (1985) found that visionary leadership, focus on the leader as a vision-oriented change agent and a people-oriented participant, was necessary for success. A visionary leader knows where the school system is and has a vision of where it should be (Renihan and Renihan 1992).

(d) ***Transformational vs Transactional***:

In a Pulitzer Prize winning study of leadership, James MacGregor Burns (1978), in an attempt to distinguish between the manager and leader dichotomy, posited that "transformational leadership" made the difference. The problem with institutions, he pointed out, is that they tend to be overmanaged and underled. They are, he posits, **transactional** leaders -- custodial and competent but routine and uninjured -- who approach their followers with an eye of exchanging one thing for another (cf. Sergiovanni's "Bartering"). In contrast, Burns (1978) purposes the **transformational** leader -- one who has the important traits of mission, vision, and a purposeful determination to go beyond dealing with day to day problems and focus on the development of a new level of awareness; in other words, that unique ability to

construct a process for change in the organization ... in sum, a manager and a leader!

(g) *Comprehensive:*

A summative and detailed representation eclectically culled from leadership protestations of Leithwood (1985), Sergiovanni (1984,1989, 1991, 1993), and McGreal (1992), groups current concepts with the past and provides a comprehensive theory of leadership -- a new approach that delineates five integrated and interconnected qualities that help to summarize all of the above classifications.

-***Technical*** -- with sound management skills (strategic planning, policy Making) --- the **task-oriented managerial/assertive leader.**

-***Humanistic*** -- human resources management: people-oriented through trust and collaboration --- **the individual-oriented** and **instrumental leader**

-***Educational*** --- possessing expert knowledge about schooling, staff development, instruction, curriculum, supervision --- the **instructional leader**

-***Symbolic***--- the model for pro-active change, commitment, collaboration, order, and direction through a focus on others and their involvement --- the **transformational and human-resources leader**

-***Cultural*** --- a sharing participant who builds a unique school focus of shared assumptions, purposes, norms, values, and beliefs --- **the visionary leader**

All in all, a moral (action) leadership paradigm that features a more humane and compassionate approach, recognizes the importance of the individual (self-fulfillment through participation), and encourages the individual by "uplifting", supporting, and "doing the right thing" according to a set of values. The ground rules are high moral principles to enhance the

supervision and the leadership aspects within the INDIVIDUAL.

4. <u>Pertinent Characteristics</u>

1. **instilling strong common purposes and goals -- a sense of vision** (Austin, 1979; Lezotte, 1982; Firestone & Herriott, 1982; Peters & Austin, 1985; Mortimore & Sammons,1987; Lyons & Sheatem, 1988; Wentz, 1989)

2. **initiating a strong work ethic** (Bennis & Nanus, 1984; Blase, 1987)

3. **consideration for the workforce (humanistic/people-oriented/visible)** (Rutherford, 1985; Kotter, 1982; Peters & Austin, 1985; Blase, 1987)

4. **high expectations** (Edmunds,1980; Shoemaker & Fraser, 1981; Duignan,1986)

5. **enthusiastic** (Stringfield & Teddie, 1988; Arnn & Mangien, 1988; Johnson, 1989)

6. **a motivator** (Cuban, 1981; DuFour, 1986, Short & Jones, 1991)

7. **collegial interaction (collaboration)** (New York Study, 1981; Edmonds,1982; Sydner, 1983; Watkins, 1984; Miller, Cohen, & Sayne, 1985; Sackney, 1986; Furwengler, 1986; Davis & Thomas, 1989; Pajak & Glickman, 1989)

8. **endorses networking** (Sergiovanni, 1982; Goodlad, 1984; Deal, 1986)

9. **competent/capable** (Purkey & Smith, 1982; Ingrassa, 1982, Bennis & Nanus, 1985; Babiuk, 1989; Johnson, 1989; Adams & Bailey, 1989; Brookover, 1982)

10. **empowers teachers (participatory approach)** (House, 1980; Hull, Rutherford, Hord & Huling, 1984; McCormick-Larkin, 1985; Purkey & Smith, 1985; Sackney, 1986; Mortimer & Sammons, 1987; Davis & Thomas, 1989)

11. **sensing change & adapting** (Peters & Austin,1985; DuFont & Eaker, 1987)

12. **being in touch ... listening** (Peters & Austin, 1985); Walburg et. al., 1989)

The 'L' of the LINC *Interactive* MODEL

L/C/D: LEADERSHIP, COMMUNICATION, DECISION-MAKING

8.2
Communication

1. Definition

Except for a few variations in word usage, the definition of communication in educational administration texts is very similar. In the context of school system evaluation, communication refers to any means by which information is exchanged between individuals. This could involve meetings, newsletters, directives, memos, computer networking, etc; that is, any of the various processes for the imparting and interchanging of information, thoughts, and opinions.

2. Significance

Many researchers have documented how communication is vital to the success of a school system. Chester Barnard (1938) defined the first function of a senior administrator as developing and maintaining a system of communication. Sergiovanni (1984) noted communication as a very important asset to building an effective school system, and Roger Smith, as quoted by R. A. Flordo (1990), asserted, "good communication is the key to organizational effectiveness" (p. 193).

Since the management functions of planning, organizing and controlling involve communication, an Important purpose of organizational structure is to facilitate the processes of communication. Three major premises, culled from organizational effectiveness studies, delineate the

significance of the communication process as a fundamental and integral practice for any school system. They are:

1. Communication patterns and processes are the vehicles by which employees become co-ordinated and directed towards goals and objectives;
2. Structure, technology, and size of the organization are almost entirely dependent upon and determined by communication techniques; and
3. Leadership, decision-making, and adaptation are determined by the effectiveness of communication (Steers, 1972; Beer, 1973; Silver, 1983; Hoy & Miskel, 1987). Effective communication is considered to be the cornerstone of the entire leadership process.

3. **Classifications**

(a) FORMAL: Formal communication consists of feedback sessions ("loops") that orginate from the top of the organization and comprise directives that initiate and reinforce the appropriate behavioral policies of the school system (Hoy & Miskel, 1987). The formal network, the official means of communication within the system, not only transmits information directly to its employees, but also interprets that information according to its principles and practices (Deal & Kennedy, 1982).

(b) INFORMAL: Informal communication consists of a vast, open network among the employees (workforce) of the system. Of all the avenues of communication, none is more important than the informal communication network or "grapevine" structure, without which many administrators would be lost (Licata and Hack, 1980). Employees admitted that, aside from their immediate supervisors, the source for any information was the grapevine (Patrick and Manning,1991).

(c) DIRECTIONAL: In disseminating information, school systems constantly strive to improve flow and to enhance accuracy and acceptance in order to reduce uncertainty. A remedy for uncertainty can usually be found according to the direction of the intended message. Four possible directions (| (downward), – (horizontal), | (upward),and / (diagonal) for the flow of information are given in Table 8.1 below.

Table 8.1: 4 DIRECTIONS & TRAITS of COMMUNICATION:

(|, –, |, /)	What it is:	What it should do:
DOWNWARD (|) (formal)	TOP-DOWN information emanates from the top of the administrative structure and filters down to all members.	Explain policy clearly by use of feedback mechanisms and multiple channels that employ repetition and reinforcement.
UPWARD (|) (informal)	BOTTOM-UP Information (ideas, policies) emanate from the bottom of the organizational structure and flow to the top for approval.	Reduce status & distance, allow for essential feedback, provide free flow of expression, and generation of ideas
HORIZONTAL (–) (collegial/ informal)	BETWEEN PEERS Open dialogue across "line" personnel, i.e. individuals at similar position on the chart. (e.g. supervisor to supervisor).	Foster interpersonal skills with colleagues,utilize reward systems, organize "level" meetings, provide exchange of expertise.
DIAGONAL (/) (profess-ional)	DIRECT access to any superior; by-passing other superiors. (NO MIDDLEPERSON)	Allow for direct interchange between any individuals in the system without fear of intimidation or incrimination. Eliminate formal barriers.

[MacLellan, 1994]

(d) FEEDBACK-FEEDFORWARD: As a constant flow between the environment and organization, communication is usually in the form of feedback loops that filter back reactions internally (teachers/students) and externally (PTA/Advisory Councils) regarding policies and practices. Olsen (1978) speaks of feedforward as another way in which a system can adapt to its environment. Feedforward emanates from individuals within the system who anticipate the probable consequences of activities for the system and environment before any actual occurrence.

(e) OPEN: Communication must have a clear, open, and direct pattern to avoid second-hand misinterpretation or the multiplicity of system "noises" that plague any communication flow (Hoy & Miskel, 1991). Open communication can avoid the barriers associated with the individual as frame of references, selective listening, value judgements, source credibility, and semantic problems as well as the organizational barriers of communication overload, in-group language, status differences, and time pressures (Hoy & Miskel,1987).

An open two-way feedback and feedforward communication process is achieved through a myriad of devices such as newsletters, public relation events, round table meetings, staff forums, visions and values, orientation sessions and quality people/quality leadership management programs (1991 Annual Report, Royal Bank of Canada). Practices such as (1) following up, (2) regulating information flow, (3) utilizing feedback, (4) having empathy, (5) repetition, (6) encouraging mutual trust, (7) effective timing, (8), simplifying language, (9) effective listening, and (10) using the grapevine should be everyday occurrences in an open communication system (Silver, 1983; Gue, 1977; Hoy & Miskel, 1987).

4. **Pertinent Characteristics**

Individuals in leadership positions must have appropriate skills, knowledge, and attitudes if effective communication is to exist. Skilled communication serves to develop positive working relationships between the administration and the work force (Faidley & Musser, 1989). The following six desirable factors of communication, as synthesized from effective school research, can serve as a guide in evaluating the communication component of a system.

1. **Being committed to open channels of communication.** (Sergiovanni, 1982; Edmonds,1982; Abrell, 1984; Bennis & Nanus, 1985; Wilson, 1985; Babuck, 1988; Valentine and Bowman,1988; Johnson, 1988). Such a skill denotes the ability to disseminate openly all important policies, principles, and practices of the organization, to inform staff of all new developments, to discuss mutual concerns and problems that directly affect the system, to involve employees in such discussions, and, all in all, to openly share envisioned goals in order that growth can result in the system.

2. **Being accessible.** (Firestone & Herriott, 1982; Goodlad, 1984; McCormick-Larkin, 1985; Mortimer & Sammons, 1987). This quality means being available to members of the work force and work place. David (1988) found the informal approach of "managing by walking around...perhaps (the) most important leadership tactic" (p. 78); that is, being "on deck" and, therefore, easily accessible. Again, accessibility makes it possible to be able to communicate rewards in a sincere and honest manner and to be receptive to suggestions. Direct access to teachers and to students is paramount to the success of any educational system (Sergiovanni, 1984).

3. **Being approachable.** (Harnish 1987; McCormick-Larkin, 1985; Peters & Waterman, 1985; Walburg, Bakalis, Bast, & Balt, 1989). Listening, showing

genuine interest, making people feel at ease, and demonstrating an understanding of the individual are key ingredients to being approachable. In dealing with the individual, effective leaders display qualities of sensitivity, perception, encouragement and reinforcement.

4. **Being responsive to the concerns and aspirations of others.** (Levine, 1985; McEvoy, 1987; Kotter, 1982; Comer, 1988; Bellon, 1988; Williams & Chavkin,1989; Storey, 1989; Henderson, 1989; D'Angelo & Adler, 1991; Crispeels et al., 1991, and Epstein, 1991). Effective communication also means listening to others and seeking opinions and feelings of the workforce regarding system-related problems. There should be opportunities to listen, to provide feedback, and to share ideas that will help resolve problems and strengthen the organization.

5. **Encouraging mutual trust.** (Wood, Feeland, & Szabo, 1985; Peters & Waterman, 1985; Sizer, 1988; Sickler, 1988; Sergiovanni & Starrett, 1988; Cangelosi, 1991). The communication process and its accuracy depend on trust. Persuasive communication often serves to get people to follow leaders by strengthening their confidence in them. Cooley and Lohnes (1976) maintain that there are "two virtual conditions that must be met for successful operation: good communication and confidence" (p. 341).

6. Being adaptive to change: (Fullan,1988; Sergiovanni and Starrett, 1993) Many researchers advocate that school systems today must be aligned with the vast and rapid information and communication revolution (technology and computers) that characterizes modern society. Toffer (1990) argues that power, both economic and political, is now and will increasingly be based on the control and use of information.

The Linc *Interactive* MODEL:
(L/C/D) = LEADERSHIP, COMMUNICATION, DECISION-MAKING

8.3
DECISION-MAKING

1. Definition

Like many of the other components of the **LINC *interactive* Model** for school system evaluation, decision-making (DM) is defined by various writers in many different ways. Cohen (1973) concluded that "decision-makng is, of course, an euphemism for the allocation of resources -- money, position, authority, and so on" (p.24). In contrast, the Random House College Dictionary, Revised Edition (1988) defines decision-making as "the art of deciding, as on a question or problem, by making a judgement". As previously mentioned in Chapter III (when defining the concept of evaluation), many theorists contend that the best rationale and primary justification for evaluation is providing information for decision makers (Stufflebeam et al.,1971; Atkin et al.,1979; Alkin, Daillect, & White, 1979; Alexander & Farrell, 1981).

2. Significance

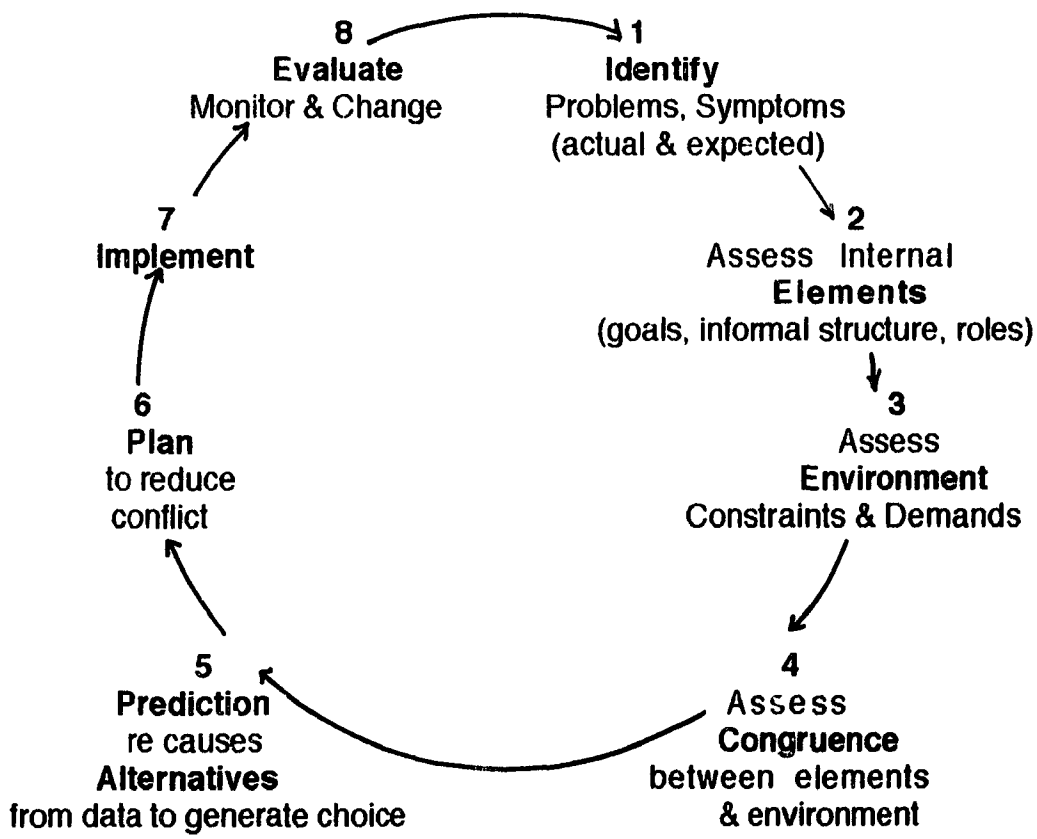
A sound theoretical framework that groups decision-making with leadership and communication (the L-C-D of the **LINC *interactive* Model**) is important to the success of any school system (Hoy & Miskel, 1991). Sound "DM" theory helps to formulate policy that defines process, adjusts for inconsistencies, and develops a consistent, district-wide basic theoretical structure that provides a sense of direction for the school system (Hendrickson, 1989).

3 & 4. Classifications & Pertinent Characteristics

The quality of administrative expertise can be evaluated by the type of decision making process exercised before implementing a course of action. An example of some sound decision-making processes are:

(1). **The rational decision-making approach:** This approach essentially means choosing the best among available options. The choice implies that alternatives were identified and that pertinent information was considered about the relative merits of each option on a criteria of performance that optimized the best alternative. The rational decision-making cycle (Figure 8.2). is often called the classical and administrative theory of decision-making (see Hoy & Miskel, 1991).

Figure 8.2: **Rational Decision Making Cycle**
[adapted from Hoy & Miskel, 1991)



A school system must be constantly exchanging two variables with the environment: resources (money, technology, teachers, students, etc.) and information (data; e.g., goals, values, actions, outcomes, etc.). The information that flows from the environmental matter will determine the type of decision made and, subsquently, the state of the system. In other words, the decision will denote whether the climate of the system will be one of (a) status quo, (b) equilibrium, (c) conflict [interest groups] (d) variety reduction (reducing the operation to simpler forms), (e) change, or (f) survival.

(2). **Strategic planning:** A more up-to-date version of the rational decision-making administrative process is **strategic planning**. Below is an outline that explicates strategic planning (Figure 8.3). It has been synthesized from two writings of Downey (1988, 1991), and is denoted by the acronym, IDEA.

Figure 8.3: **Strategic Planning**

I. D. E. A

|

~IDENTIFY~

(Scan environment for needs set targets in response to environmental data, determine and assess social, economic and political ramifications; involve stakeholders in planning, brainstorm, analyze trends, prognosticate)

|

D

~DIAGNOSE~

(Contemplate, weigh, & create alternative strategies, estimate feasibility, analyze SWOTS, innovate, take risks)

|

E

~ELECT~

(Selection by synthesis, process of choice, critical path planning of process, not product)

|

A

~ACTIVATE~

(Implement, motivate, cyclically evaluate, encourage feedback)

The similarities in the two approaches may be seen in the inclusion of such practices a environmental scanning, weighing of alternatives through an assessment of SWOTS (strengths, weakness, opportunities and threats), and the emphasis on a vision, mission statement or clearly articulated goals (Kaufman & Herman, 1991).

Downing (1991) suggests that such a model (I.D.E.A.) can be adapted to any of three stages: (1) micro (the individual), (2) macro (the organization), and (3) mega (the environment). This model for decision making resembles the rational decision making process in that both (1) proactively identify issues or needs, (2) create alternatives, (3) estimate and analyze feasibilities, strategies, etc., (4) select a course of action, (5) implement decision(s), and (6) assess outcomes (Downey, 1991; Mitchell, 1988). A checklist format for instituting strategic planning and incorporating the stages of rational decision making can be illustrated (Figure 8.4) in its application to specific components of the **LINC *interactive* Model.**

Figure 8.4: **Operational Decision Making: An Application Example**
Stages in Strategic Planning

	I Identify problems, issues, needs.	D Diagnose alternatives predictions.	E Elect option	A Activate, implement, monitor, evaluate.
GOALS (mission)				
STRUCTURE(administration)				
ENVIRONMENT(congruence)				
WORK FORCE(individual)				
CURRICULUM (programs]				
WORK PLACE (facilities)				
Leadership (style/behaviour)				
DM(process)				

3. Centralized and Decentralized: Another type of decision-making process is the choice between a centralized approach (one which is hierarchical, bureaucratic, and employs short term objectives and a decentralized approach (one which is professional and employs long term objectives) [Sergiovanni, 1987].

The general consensus among present day writers is that reforms are more effective when carried out by a workforce; that is, decentralized in that the employees have part ownership ("shared governance") of the decision-making process (Casner-Lotto, 1988; Karant, 1989). Decentralization of major components of decision-making places all educational administrators closer to the decision making and risk taking processes. In supervisory meetings, for example, joint efforts, shared problem solving techniques, and brainstorming can be used. On the other hand, March & Miklos (1983), claim that the influences of the economic and political climates and the calls for accountability have created a situation "which is more favorable to the centralization of decision-making" (p. 3).

Three examples of **decentralized** decision-making are:

(a) **School-based management** -- defined as a decentralized organizational structure in which the power and decisions formerly made by the superintendent and school board (i.e., centralized) are delegated to teachers, principals, parents, community members, and students of the local schools (Lindquist & Mauriel, 1989). In effect, the school becomes the primary unit of decision-making. Types of decisions made through a decentralized approach are usually budgeting, curriculum, personnel, resource allocation, evaluation, and future planning. Under school-based management, the autonomous and accountability factors of professional responsibility replace

centralized bureaucratic regulations (Guthrie,1986; Sickler, 1988; White, 1988; David, 1989; Lindelow & David, 1989;Kimbouough & McElrath,1990).

(b) **Shared/Collaborative/Empowered** -- where committees of administrators, teachers, parents, and students collectively develop their own strategic improvement plans, in other words, where decision making is collaborative (Synder, 1983). One of the major determinants of the effectiveness of school systems is how well decision makers work together to direct the educational organization towards goals. In today's educational systems, the general movement is towards collaborative and collegial decision making where all stakeholders have the opportunity to discuss issues, to promote change, and to deal with decision-making scenarios (Rempel & Rempel, 1987; Casner-Lotto, 1988; Davis & Thomas, 1989; Conley & Bacharach, 1990).

(c) **Consensus Forming** -- an approach useful in helping stakeholders to work together in goal planning and decision-making. Consensus tends to build when people behave or act in consistent and predictable manners. Examples of consensus within a school include the specific times to begin and end the school day, the appropriate time to speak with the principal, the time to eat lunch, etc. -- agreed upon and then mandated by the administration (Knapp, 1985).

4. Other: The use of educational theory in decision making creates negative responses in the minds of educators. As a result, educational administrators usually adopt pseudo decision-making approaches. One, the **quick fix**, the common **incremental** trial and error method of decision-making, is, unfortunately, often used by some school system administrators as the best way to avoid responsibility (Kilmann, 1985). Another, is the **garbage can**

process of decision making in which problems, solutions, and participants move from one discarded choice to another in such a way that usually, the nature of choice depends on the complicated intermeshing of choices formerly available. These approaches border on organized anarchy, divert a school system's energy, and maintain the status quo --- for not to decide, is to decide (Kilmann, 1985).

The LINC *Interactive* MODEL
I: INTERACTION and the INDIVIDUAL

8.4
(B): THE WORK FORCE
[i.e. The INDIVIDUAL (the employee)]

1. Definition

Whereas the Random House College Dictionary, (Revised Edition, 1988) defines an employee as "a person working for another person or a business firm for pay; worker", for this study, workforce is defined as the employees of the school system -- the many professional and non-professional individuals who constitute the staff of a school system, be that the teachers or the support staff (secretaries, caretakers, bus drivers, aides, clerks, etc.). In this way, the definition differentiates the workforce from the senior administrators (Superintendents and Supervisory staff).

2. Significance

Although there are many components of a school system, two major elements are fundamentally basic. From a sociological point of view, there is the organizational component; from a psychological standpoint, the individual component. Hoy and Miskel's (1991) text: Educational Administration: Theory, Research and Practice illustrates this fact in that its contents, alike similar books on the same topic, can be readily divided into two major sections; Organizational Structure and the Individual.

The workforce component of school systems has become extremely important in the past ten years. From the findings of the literature review conducted in this study, the results showed a difference of 21 to 62

ratings for the workforce component in the reviewed literature of the 1970's and 1980's respectively. (Other components such as **Leadership** (23-71), the **Work Place** (17- 62), **Culture** (8-32) and **Communications** (7-34) show equally striking differences.

Much of the educational literature of the late 1980's attest to the importance of the individual and denote people or groups of people as the key element in a social system. The attention presently being paid by organizations to the individual employee over the past decade has been phenomenal. Study after study has pointed out the premise that the individual must be the major concern of any organization. One of the major studies to substantiate such an assertion has been the 1987 and subsquent publication by the Financial Post of the "100 Best Companies in Canada". The common thread in each synopsis confirms the belief that the success of any organization lies in the nurturing and care of its employees. Hoy and Miskel (1987) acknowledge that "the reach for effectiveness in schools is a search for excellence in people" (p. 400).

Such a focus has also been continually echoed in yearly Annual Reports of companies such as the 1991 Annual Report of the Royal Bank of Canada as well in the writings of such theorists as McGreal (1983), Leithwood (1985), Blase (1987), Sergiovanni (1991), and Richard Steers' (1977) organizational effectiveness studies categorized employees as one of the four major components of the organization (the other three being structure/ technology, environment, and management). The key to a school system's success seemingly lies in the people who inhabit the organization and their interactions within that system.

3. **Classifications**

The workforce (individual) element in school system evaluation encompasses such topics as (1) Employee Behaviour, (2) Motivation, (3) Collegiality/ Collaboration, (4) Professional Development, (5) Informal Organization, and (6) Performance/Expertise. Time can be readily consumed by considering only the demographics of the employees of each of these sub-classifications -- staff, size, ratios, departments, certification, tenure, etc. Also included in "workforce"are a wide range of other evaluative criteria such as the individual's needs, personal habits, job description, ethics, etc. (Sergiovanni & Starrett, 1979). An evaluation of the workforce also crosses many other sub-classifications such as instruction, finance, administration, maintenance, and conveyance.

Technology is rapidly changing the workforce. Alvin Toffler (1990) in his bestseller, Powershift, suggests "workers may become divided into two groups -- those who are computer literate and those who are not" (p. 38). Such is the importance of modern technology to the educational workforce of the 90's and, without doubt, one of the first observations any evaluator should make in an evaluation of it.

4. **Pertinent Characteristics**

From studies of organizational and teaching effectiveness, there emerges significant evaluative criteria to assess the workforce; for example,

(a) Employee Behavior: the assessment of which alludes to roles, behavior, norms, motives, expectations, needs, desires, outcomes, and psychological states (e.g., experiencing task meaningfulness, responsibility, relationships, accountability, etc.) -- either as an evaluation of the individual's

capability or as an evaluation of measurable performance objectives. Of all these varied sub-components one can enumerate, relationship of the employee with employee and of employee with administrator is a key to an effective workforce (Lezotte, 1982; Johnson, 1989; Conway 1990). A disgruntled workforce can sabotage any school system. The question can be asked as to whether the behavior of the employee exhibits satisfaction with all aspects of the system -- leadership? decision-making? communication? professional growth? career ladder opportunity? needs? goals? ... and if yes, is the employee contributing to the effectiveness and efficiency of the system? Levine (1985) summed up such queries by postulating that people are the root of productivity and quality, and consequently, must be motivated and evaluated intrinsically and extrinsically. Peters and Austin (1985) term such a workforce as "turned on people".

Gilbert Austin's (1979) study of exemplary schools in New York, Pennsylvania, Delaware, and Maryland revealed that, although there was no single factor for exceptional schools, the most important characteristic was a workforce with a positive perspective. In a similar finding, Bickel (1983) indicated that a positive psychological climate among practitioners, excuded optimism, and increased effectiveness. Cuban (1990) acknowledges that positive teacher behavior is the major concern and "is crucial for any change to take place in school systems" (p. 75). And the Phi Delta Kappa New York Studies (1980) emphasized the importance of workers feeling important, being given freedom to determine their own goals, and receiving guidance in conflict resolution. Autonomy outshone rigorous supervision!

(b) Motivation: Of all the evaluative factors most significant in the workforce, none is more important than motivation. Peters and Waterman

(1982) discovered that the best run companies were those that could motivate average employees to extraordinary performance. Beer (1980) claims that motivation is just as important in a school system as energy sources (e.g., finances). A positive motivated teaching and administrative workforce readily equate to an effective school system. \Sergiovanni (1989) said that one way systems could motivate employees would be to hire motivated employees.

Educational systems in Canada offer few incentives to their workforces. Most school systems contractually offer sabbaticals and professional development days, but on a competitive basis. On the other hand, U. S. school systems have, in various degrees, instilled meritorious awards, career ladders and merit pay.

(c) Collegiality and Collaboration: Sapone and Sheeran (1991) posit a "fourth wave model" that focuses entirely on individual growth as the primary source of overall organizational success. "Team consultation, collegial relationships, and cooperative learning form the basis for school improvement, for goal attainment, and for making schools more effective" (p. 69). The fourth wave gives little attention to the traditional supervision and evaluation concepts. The focus is on instructional supervision with the teacher and supervisor as partners. This new approach is based on the concept of shared decision making -- a pre-requisite to another critical component of the 90's, site based management. The human resources of the school and the community become integral to attaining goals and mechanisms for personal and professional growth of each individual. There is no hidden agenda, no fear, no anxiety. Results? More skilled teachers, learning increases, community more receptive, and school systems more accountable.

(d) Professional Development: One particular sub-

component of a school system that has become vitally important in the evaluation of its workforce, is school improvement through staff development. Part I of the 1991 Annual Report of the Royal Bank of Canada, entitled Operational Review, contains a section entitled "Our People". A perusal of that section indicates that the Royal Bank places a premium on attracting and retaining people of outstanding quality. Underpinning this philosophy is a strong emphasis on programs that recognize both the professional and personal needs of their employees, affirming that professional development is crucial to the bank's ability to provide first-rate services to their clients. In 1991, the Royal Bank spent seventy-nine million dollars on training and developing activities for their 57,596 full and part-time staff. According to Lezotte (1986), the average school system in the U.S. spends less that two percent of its resources on the renewal and upgrading of its peoples. On the other hand, private sector organizations usually spend between 7 to 10 % of their gross revenues on the renewal of their people, products, services, and systems.

Sparks et al (1985) and McEvoy (1987) cautioned any implementor that seventy percent of a staff must be in agreement with professional development programs (training, inservicing, etc.) for any project to have any chance of success. They emphasized using such subtle techniques as: brief, informal but focusedcommunication (in hallways, staff rooms), disseminating and passing on information and materials, soliciting opinions, initiating experimentation, and recognizing and communicating employees' successes.

(e) **The Dynamics of the Informal Organization** within the social structure of the school system constitute the interpersonal relations that

form spontaneously within all formal organizations and have a definitive culture and structure. These informal organizations serve as effective vehicles for communication, cohesion, and protection. In formal organizations the workforce is the mechanism by which bureaucratic expectations and individual needs interact and modify each other (Parsons, 1972; Hoy & Miskel, 1987). Recognizing and considering the workforce in groups is critical for explaining their behavior in an organization (Bacharach & Mitchell, 1987). This facet, in itself, constitutes a unit for analysis. As members interact, emergent patterns develop whereby groups create an informal work structure with their own practices and values. The group norms of the informal structure affect behavior, maintain cohesiveness, and develop its own culture, or in some cases, its own organization that dictates their own norms, needs, and behaviors.

(f) **Performance/Individual Expertise:** Kindsvatter et al. (1988), in synthesizing the dynamics of effective teaching, concluded that a well trained teaching staff -- with high expectations, competent, qualified, child-oriented, decision-oriented, adherent to professional development and educational delivery, understanding of special needs, steeped in classroom management,tolerant, responsive versed in curricula and a variety of teaching methods, strategies, and techniques, with an "informed belief system" -- was an asset to any school system. Cangelosi (1991) points out two essential ingredients for the evaluation of teachers: competence and performance.

Babrick (1988) pooled together Alberta's Education System of evaluating teachers into one working program. Questioning 116 superintendents in Alberta, he asked them to identify a school district other than their own which had developed an effective teacher evaluation program.

The results of the study combined with a study of the Red Deer Public school system resulted in seven factors of importance: compatability, commitment, congruence, competency, collaboration, feedback, and trust. Some of the same distinct components of a "healthy" workforce are contained in Taylor's (1989) plan for improving school climate -- namely trust, collaboration, competency, high morale, collegiality, and respect.

The LINC *Interactive* MODEL
I: INTERACTION and the INDIVIDUAL

8.5
INTERACTION (interrelatedness & interdependency)

1. Definition

Interaction is defined as the interrelationships and interdependencies between components ... what the Random House College Dictionary, Revised Edition (1988), would denote as "a reciprocal action or influence of one unit upon another..." The simplest definition of interaction implies that any part of a system affects another part (Hayman, 1975). The organizational effectiveness studies of Katz and Kahn (1966), Steers (1975), Pennings and Goodman (1977), Beer (1980), and Cummings (1980) verify such a definition in that they all stress the congruence (closeness of fit) between system components like those that comprise the **LINC *interactive* Model**.

2. Significance

One of the major arguments put forth towards a new approach to the evaluation of school systems has been the absence, albeit ignorance, of this component (interaction) in current evaluations of school systems. This writer has argued that evaluation must examine the interactions, or lack thereof, of school system components in order to gauge the effectiveness of a school system. The interrelationships of components enable one to see the "big picture" (Encyclopedia of Educational Research, 1982).

Any school system evaluation model will provide a taxonomy of key organizational components to guide an evaluation. It is the sense of the

relationship and interactions between these key organizational elements, however, that can give an appreciation of the cause and effect judgements of a school system and render a decision of its efficiency and/or effectiveness.

Most evaluations of school systems overlook the key question that should be posed; viz., *is the school system as a fundamental social organization, operating as a collective entity of all of its interdependent and interactive components, providing for the optimum performance of the students who attend the school system?*

3. Classifications

Interaction is often classified as a **"mediating" component**; that is, a highly manipulative and changeable variable that, along with a number of external social, political, and economic factors, impinges on the system to produce outputs of student attainment or system change. Atkin (1982) calls the whole scenario a "micro system" in which the system is placed in **external** and **internal** environments characterized by interactions of various community, governmental, and educational forces. For example, an external sub-component such as finance has a tremendous impact on internal sub-components such as staff hiring, PTR (Pupil Teacher Ratio), new curricula, texts, etc. Not all such "mediating" factors are related to finances. Some are "free" (e.g.. attitudes, procedures, or change); others are costly (e.g., technology or staff).

The classification of key organizational components provides a sense of complex relationships between the elements of a school system and a more useful appreciation of the interchangeable causes and effects (Pennings & Goodman,1977). The change in one element of the system will

always result in changes in other parts of the system (Nadler, 1987). Homans (1950) referred to such interrelatedness as "the functional theory", a contingency necessary for meeting the needs of the system and contributing to its survival. To illustrate the interconnective aspects of a system's components, an examination of any one component (Table 8.2) initiates a domino praxis in each of the other components.

Table 8.2: A Construct of Interconnective System Components

	ATTITUDE	affects	BEHAVIOR
as	BEHAVIOR	affects	STRUCTURE
and	STRUCTURE	affects	CULTURE
for	CULTURE	affects	EXPECTATIONS
yet	EXPECTATIONS	affect	GOALS
and	GOALS	affect	ATTITUDE

[MacLellan, 1994]

4. Pertinent Characteristics

It has been constantly explicated that what is essentially needed for a clear understanding of school systems is the basic realization that they are structures of systemic interaction and interconnections. These structures are generated by an intrinsic process of differentiation of specialized components; for example, the individuals who live and react in systemic institutions function in a milieu of differentiated specialized roles that require the complementary reciprocity of other specializations -- hence the interconnection of components of the school system. As this interdependency proliferates, the component members, by being within the parameters of the system, become increasingly interconnected. They cannot isolate themselves. They cannot avoid exchange, nor ongoing change. They must co-exist interdependently

because they all share the same environment (Pennings & Goodman, 1977; Strotnik and Clark,1988).

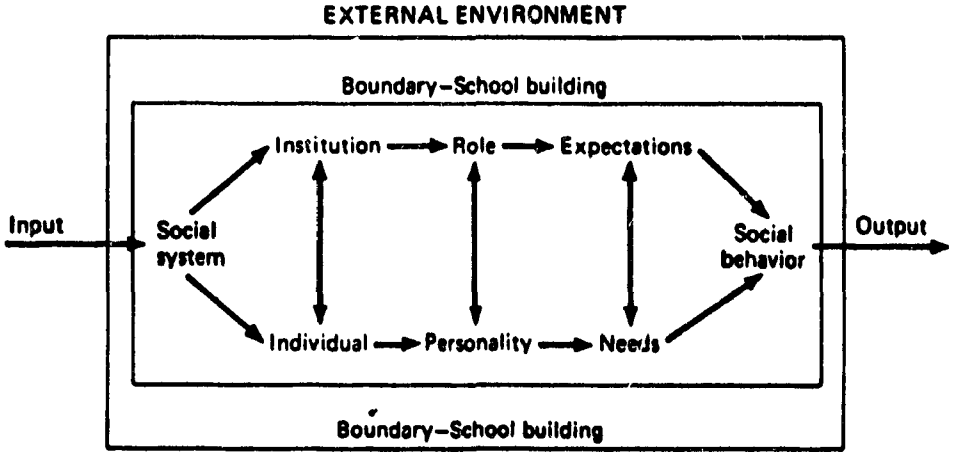
While one component must be distinguished from the other on the basis of the major functions it performs in an evaluation, the overriding challenge is to discover the extent to which the various components impact upon and interrelate with each other. Several examples of this interconnectedness are given below.

(a) Interaction with the environment (internal & external): Atkin (1979), in considering the system as the unit of examination, acknowledged two categories of input from the environment that interact greatly upon the school system: the student (as determined by the characteristics of the community) and money (as provided by the province). Recognizing these organizational-environmental-individual interactions and interconnections, both inside and outside the organization, makes it easier to understand organizational dynamics.

Ubben & Hughes (1987) assert that "schools are open systems, that is, systems that interact with the external environment" (p.38). Such interaction is for a multiplicity of purposes -- the least of which are inputs (resource acquisition) and outputs (graduates, drop-outs, etc.). Internally, interaction can be also witnessed in interdisciplinary behavior, information flows, regulations, etc. (Banathy & Hayman, 1975). Externally, such interaction with environment may be used to obtain energy, matter, and information. The environment as a unit with its financial resources as a sub-unit is a simplistic example of how one component (environment) and this one dimension (finance) can give rise to the dependencies of all the other components. As school systems are goal-oriented, peopled, structured, normative, and

sanction-bearing, these components change as environment forces change; that is, their interdependent nature contributes to the significance of their interaction (Figure 8.5).

Figure 8.5: **The School as a Social System**



Structural elements (sub-systems) using the Getzels-Guba systems model (Getzels & Guba, 1957]

(b) Interaction with stakeholders: Davis & Thomas (1989) believe that "a school is more than a set of interrelated internal elements, it affects and is affected by the outside world , especially parents and the community" (p. 66). Parent involvement, from Storey's (1989) point of view, involves four kinds of interaction. From a minimum to a maximum effect, they are: liaison (the foundation for building idea partnership, as in a PTA), support (essential resource people for consultation), influence (parents giving advice, listening, consulting), and control (active involvement side by side in decision-making). Della-Dora (1987) continually stresses her theme that the major need in education is to link teachers, supervisors, students, and others in an integrated, interactive, learning organization.

(c) **Interaction with the individual(s) [i.e.with the Workforce]:** People or groups of people are the key elements in a school system; consequently, one of the main objectives of a school system is to understand the structural and interpersonal relationships among individuals and how these relationships occur. An examination of the workforce of a school system immediately impacts on the structure, roles, and processes of the system. For example, a sub-component of the workforce as turnover in an organization could involve the observation of absenteeism, roles, motivation, quality of work, needs, commitment, trust, job satisfaction, etc. Again, the behavior of the workforce is a function of the interaction between a person's personality (norms) and the environment, between individual needs and bureaucratic expectations, and between the formal and informal structure of the system (Fullan,1992).

(d) **Interaction with leadership:** Managerial effectiveness and practices are products of the interaction of strategic goal setting, resource acquisition/utilization, communication processes, leadership, decision-making, problem solving, integration, and interpersonal relations. Effective managers will set system wide goals, translate them into smaller segments, and, as a means to an end, extend their meanings and interpretations vertically or horizontally to every department, work group, and individual. Collaboration is the key; human resources supervision, is the evaluation model(Sergiovanni, 1989)

(e) **Interaction with goals:** In determining goal attainment, the question often asked is: does the school system's philosophy (mission/vision) respond and adapt to the curriculum and structure to meet changing environmental and students needs?

(f) **Interaction with workplace:** The climate of the workplace of any organization is related to performance and job satisfaction. Individual and system needs, goals, and values must be consistent or compatible with the prevailing work environment and climate if the desired outcomes of the system are to be maximized. Statistical data relating to promotion, tenure, absenteeism, motivation, satisfaction, morale, etc., can render a comprehensive overview and evaluation of the workplace. An indicator such as motivation, while not classified as a main component, is recognized as a sub-component of the workforce and workplace (Hoy & Miskel, 1992).

(g) **Interaction with culture:** Leadership style and behavior cut across all dimensions -- especially organizational culture. It is the leader, with his/her promotion of symbols, shared beliefs and slogans, and with his/her enthusiasm, who can make a major difference by implementing a definitive culture in a school system.

The LINC *Interactive* MODEL
N: the NEXUS of all organizations

GOALS, ENVIRONMENT, STRUCTURE, and PROCESS

8.6
GOALS

1. Definition

As defined in the Random House College Dictionary (Revised Edition,1988), a goal is the desired "result or achievement towards which effort is directed ... an aim, an end." For school systems, goals are defined as broad statements that express the ends toward which all purpose and effort should be directed (Manitoba Education, 1990).

In current educational administration literature, the terms "**vision**" (Rutherford, 1985; Wood, Feihard & Szabo, 1985; Renihan & Renihan, 1989), "**mission**" (Edmunds, 1982; Watkins, 1984; Rosenshine, 1985; Lyons & Sheathelm 1988; Sackney, 1986), "**focus**" (Edmunds, 1982); Clark & McCarthy, 1983; Wilson, 1985; Reinhan, Reinhan & Waldron, 1986),"**purpose**" (Austin, 1979; Sergiovanni, 1982; Firestone & Herriott,1983; Murphy and Hallinger, 1985; Peters & Austin, 1985), and "**target**" (Lezotte, 1982; Downey, 1991) are often used as a substitute for and in the same context as the word "**goal**". Of all the variant definitions given for "goal", the two most commonly used in the '90's are "**vision**" and "**mission**". Current literature reflects vision as a personal goal that delineates where the system is going; i., an image of what the system should be (Reinhan and Reinhan,1989). The Saskatchewan School Improvement Model (1989) denotes turning such a vision into an active mission that bonds with all stakeholders.

2. Significance

Organization goals are key elements in all social systems. Peters and Austin (1985) responded that of the eight "costs" of excellence (aside from time, energy and leadership,etc.), the major investment was a "high purpose -- a goal" (p. 415). Bruce Wilson's School Assessment Survey (1985), a comparison of different schools and different dimensions, produced the same result: goals were ranked the highest of nine significant "vehicles" for success. To further illustrate the importance of goals, Herbert Simon (in Scott, 1981) emphasized that "goals supply the value premises that underline decisions ... the more precise and specific the value premises, the greater the impact on the resulting decisions" (p. 73). Baskerville, Boardman & Seagram (1984) posit that an organization's goal is the very core of their environmental model.

For thirty years (1942-72) educators unthinkingly held on to the definition as proposed by Smith and Tyler (1942) that evaluation meant determining what goals had been achieved. Such a narrow view is a common perspective of evaluation since most system evaluation approaches are derived from the "goal" model syndrome. As exemplified by the research findings of this study, however, goals are but one component of an evaluation (Stufflebeam and Webster,1988). And, significantly, goals of school systems constantly change as society tends to shift from emphasizing one set of values to another as conditions within that society are altered (Table 8.3).

Table 8.3: Societal Changes and Resulting Educational Goals

Decade	Societal Aspect	Goal
1950's	Sputnik: National Pride	Science/Math Upgraded
1960's	Special Needs	Equal Access for the Handicapped
1970's	Economic Recession	Cost-Effectiveness/Analyses
1980's	Poor Test Results	Excellence in Education
1990's	Global Competition	Team Quality Workmanship

3. Classifications

There are three types of organizational goals (Table 8.4):

Table 8.4: Organizational Goals

Goal =====>=====> Official Operational Operative =====>====> Behaviour

[adapted from Hoy & Miskel, 1991]

(1) **official** - formal statements of purpose developed by the administration to articulate the mission of the school system, e.g.," to promote the development of the child to his/her full potential".

(2) **operative** - the true intentions of the organization -- the actual functions and activities; e.g., " to improve the mathematical skills of all elementary students".

(3) **operational** - specific statements of expectations; e.g., measurable performance and behavioral objectives such as "80% of all students in the school district will achieve a stanine of 4 or better in the provincial SAT's (Standard Achievement Tests)".

Of the above three, Hoy and Miskel (1987) assert that "the operative goals reflect the true intentions of the organization. They mirror the actual tasks and activities of the school, irrespective of what officials claim" (p. 68).

An evaluator must also analyze the **unintended** and **unanticipated** goals (Scriven, 1967) to determine the degree of congruence and alignment between goals of the administration (central office/board) and goals of the various sub-units (schools) of the system. The attempts to analyze a school system and to improve it will be difficult if the evaluator doesn't understand the **real** goals. Goodlad (1987) acknowledges that the rhetoric of change or the attempts to improve activities does not result in any innovation

because the real goals and hidden goals are vastly different. The hidden goals relate to the needs of the individual whereas the real goals usually pertain to the needs of the organization. The problem, however, is that the hidden goals are often the goals toward which the system is moving. As a result, the evaluator must be able to point out discrepancies (Provus, 1971) between the ideal (intended) goals and the actual (unintended) goals (performance) if the evaluation is to be credible and provide direction for the improvement of the school system. The premise formulated by Scriven (1967) in his Consumer Oriented and Goal Free models has been that goals may be necessary for planning but are often unnecessary for process or productivity. In Scriven's estimation, it is more important to look for the unintended and the unanticipated goals because they can often reveal the real significant effects.

In evaluating the goals of a school system, the important questions to be asked are: What evidence is there of goal attainment? of goal appropriateness? of adaptiveness of goals? Lorch (1987) posits that "one of the primary sources of tension within school districts is the need for educational administrators to satisfy goals related to administrative efficiency as well as educational attainment" (p.38). Goals, by their very nature -- educational, operative, administrative, or official -- are sources of system conflict. All systems, says Hayman (1975) have goals ... "at least one of which is always survival" (p.5).

4. Pertinent Characteristics

School level and district level goals should be few in number, prioritized, explicit and clearly defined (Hoy and Miskel,1991). They should be relatively difficult in order to sustain a "zone of acceptance" characterized by

stakeholders' interest and expertise. They should also be timely, relevant, and aligned in the sense that the system, schools, classrooms, personnel, etc. reaffirm and emphasize the same goals within the system and during the same period of time (Bickel,1983).

School effectiveness researchers offer basic principles that are important in developing an evaluation approach to a school system's goals; for example,

1. The academic focus must be on basic academic skills, reflected in the portion of the school day that is actively engaged in this characteristic. (Brookover, 1981; Edmonds, 1981; Purkey,1983; Rosenshine, 1985),
2. Goals and objectives, fundamental to effectiveness, must be developed and implemented with a clear specification and sense of purpose (Arnn and Manigan,1988; Johnson,1989),
3. Staff consensus for goal setting is essential in that "bottom up" planning produces strong support for sharing a common purpose (Rutter, Mortimer et al.,1979; Synder, 1983; Firestone and Herriott, 1983; Sackney, 1986),
4. The mission and goal statements must be translated into performance behaviors and be consistent with the systems' philosophy. (Ingrassia, 1982; Goodlad, 1984; Watkins, 1984; Murphy and Hallinger, 1988).

Goals are a major measurable evaluation tool of a school system in that an astute evaluator will attempt to detect how goals align in one area of the system with other components; e.g., the goals of an organization are often negotiated relative to standards, needs and decision-making (House, 1973).

The LINC *Interactive* MODEL
N: the NEXUS of all organizations
GOALS, ENVIRONMENT, STRUCTURE, and PROCESS

8.7
ENVIRONMENT

1. Definition

For the purposes of this study, the environment of a school system is defined as those segments of society outside the school system that provide the necessary inputs which play a vital role in transforming young people into educated citizens. As Hoy and Miskel (1987) succinctly put it, environment consists of "the external segments outside the system that provide the inputs" (p.38). Environment, therefore, constitutes anything outside the boundaries of the school system that affects the characteristics of its internal components and influences the way the system operates (Hayman, 1975).

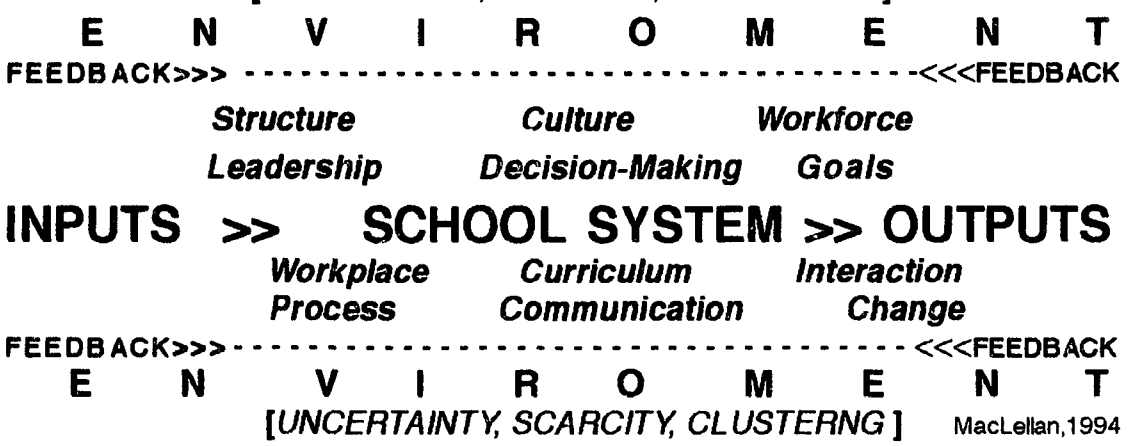
2. Significance

The importance of environment is seen in its composition of people [stake-holders such as parents, unions, interest groups, etc.], places [governmental units (especially provincial and municipal)], and things (both concrete and abstract) such as resources, materials, culture, politics, technology, law, etc.). Perhaps the most significant aspect of environment to a school system is the realization that the system cannot survive without environmental resources. Hoy and Miskel (1991) claim that "school decision-makers monitor the environment for information, and their perceptions determine to a large degree the future directions of the organization" (p.70).

3. Classifications

The environment of a school system can be **open** or **closed**. An open environment is at the perimeter of the school system in the form of inputs and outputs. In Figure 8.6, the broken line intentionally exemplifies the open boundary that should exist between the environment and the many components of a school system. A closed environment would be characterized by an impenetrable boundary where no exchanges or transactions would flow freely between the school system and its environment.

FIGURE 8.6: AN OPEN ENVIRONMENT OF LINC COMPONENTS



MacLellan,1994

Figure 8.6 also illustrates the constant need for an open response ("a feedback loop") within and without the system in order to foster the needs and aspirations of those who maintain it and those whom it serves. Feedback from the environment is essential to the success and stability of any school system. The constant impingement of environment necessitates openness and interaction from every component of the school system.

Another way environment can be classified is as (1) **specific** and (2) **general**. A specific environment applies to external elements that

have immediate and direct effects on the organization; namely, stakeholders, associations, unions, legislatures, provincial agencies, interest groups, etc. The general environment refers to broader trends and conditions such as technology, political and legal structures, social conditions, cultural values, and economic, ecological, and demographic patterns. A mistake often made by the administration of a school system is to focus on monitoring the process of the **specific** and fail to recognize the impact of the **general.** It is the general environment which determines the specific environment.

4. **Pertinent Characteristics**

(a) **Environmental Conditions:** The environment creates external demands, constraints, and opportunities to which school systems must respond. The school system's response to environmental factors (general and specific) depends upon the degree of uncertainty, clustering, and scarcity in the environment (see Figure 8.6).

[I] **Uncertainty** creates a state of instability, indecisiveness, vacillations, and complexities that result in unpredictable outcomes. Today, the rate of change is accelerating, competition is being intensified, global economics are superceding local and national perspectives, and technological innovations are exploding (Toffler, 1990).

[II] **Clustering** is the degree to which environmental groups (usually with a powerful set of demands), are organized and structured. These interest groups produce strong restraints and strong pressure where the price of system survival is either compliance, co-operation or confrontation with such groups.

[III] **Scarcity** depends upon the resources available to support

and sustain growth. When resources are not forthcoming, school systems either enter into exchanges or competition with various other environmental agencies to obtain its share of resources or adapt internally to overcome shortages (Hoy & Miskel, 1989).

All three states (uncertainty, clustering, scarcity) threaten the autonomy and effectiveness of the organization. The state of the environment is the external factor that administrators must know; that is, whether or not the social, political and economic conditions of the environment are neutral, feasible, visible, acceptable, indifferent, hostile, or supportive. For example, Muhdate and Shute (1991), in their appraisal of the British Columbia "Year 2000" plan, underscore the jeopardy of the futuristic plan for education in that province because of the tense political climate and the dismal state of the economy. Consequently, the school system has to develop coping strategies such as buffering and adaptation in order to maintain control.

(b) Environmental Concerns: In the 1990's, there are the environmental concerns of the economy, unemployment, AIDS, single parent families, drop-outs, staff decreases, etc., ... all of which have placed extra burdens on the school system. Parents and society in general now demand that schools do what the environment (particularly the home and the church) once did; that is teach everything from safe sex to the rudiments of budgeting (Housego, 1980; Hathaway, 1986). Moreover, business has quietly but noticeably begun to infiltrate the school system. Companies are constantly preaching the need for literate and technologically skilled graduates.

A study of 104 school districts in Colorado by Bidwell and Kasarda (1975) provided evidence of the significance of environmental concerns for school districts; namely, structure, pupil-teacher ratios,

centralization, supervision, specialists, and financial resources, and environmental conditions such as size, technology, resource allocation, socioeconomic status (SES), student composition, and community and parental preferences as determinants of school district effectiveness.

(c) **Environmental Boundaries:** School systems, loosely coupled and bureaucratic by nature, cannot survive by establishing boundaries against their environment. The greater the degree of boundary openness, the more the system is dependent on and influenced by its environment and the less vulnerable it is to decay or loss of resources (Olsen, 1978). Systemic and environmental interactions, called cross-boundary transactions, involve people interacting, sometimes with their norms and values in conflict and most times with the system engaged in boundary maintenance. While it is critical that the school system exchange with the environment, it is also critical that the system controls the nature of the exchange. To do that, it must control the boundary in the way the exchange affects the internal components and the attributes of the system as a whole. To analyze the school system, one must be able to define the boundaries, gauge the degree of openness, identify interrelationships, describe cross-boundary transactions, and determine the boundary aspects affecting the school system.

(d) **Environmental Scanning:** One of the major steps in strategic planning is environmental scanning -- the fundamental need of school systems to anticipate social, economic, political, and technological change. It is like a needs assessment, that is, a community survey of needs or a trend analysis of demographic statistics for future forecasting. Kaufman and Herman (1991) state that decision-makers (if they are to make good decisions) must "scan both the internal educational organization and the external society

and communities" to identify futuristic needs (p.38). The perceptions of the administrators determine to a large degree the future directions of the organizations (Steers, 1977; Hoy & Miskel, 1987; Herman, 1989).

(e) Stakeholders' Approach: The current trends and issues in education in the l990's center around decentralization of control through such methods as on-site management, participatory management, and community schools -- where the parents, students and teachers, to varying degrees, are involved in decisions affecting the delivery of education in their local communities. Attempts undertaken to receive input from the environment, to improve school community relations, and to involve stakeholders should be noted in an evaluation of the environment (Weber, 1971; Edmunds, 1979). Newton & McKinnon (1990) claim that "If a school system evaluation [is] going to be undertaken, they [stakeholders] should be involved in a significant way (p. 10). Of all stakeholders, parental involvement must be considered an integral part of the education process --- not just in fund raising projects but in being equal partners with educators (Williams and Chavkin, 1986; Comer, 1988; Henderson, 1988; Brandt, 1989; Storey, 1989; Lindle, 1989; Davies, 1991; Crispeels, 1991).

There are many examples of ways that school systems can keep a pulse with the community. Atkin, Bastiani and Goode (1988) suggest face to face and written communications, Epstein (1989) purposes post card surveys and follow-ups, while D'Angwlo & Adler (1991) recommend electronic communications and parent centers. William & Chavkin (1989) delineate seven essential elements of a successful parental involvement program, including administrative support, training and collaboration, two-way communication, and partnership approval (parent involvement at all levels).

The LINC *Interactive* MODEL
N: the NEXUS of all organizations
GOALS, ENVIRONMENT, STRUCTURE, and PROCESS

8.8
STRUCTURE

1. Definition

The Random House College Dictionary (Revised Edition, 1988) defines structure as "the manner in which the elements of anything are organized and interrelated". When applied to school systems, structure is usually referred to as the organizational chart ("the schema") that delineates the position of different roles in the school system (Blau & Schoenherr, 1971; Moti, 1972; Steers, 1977; Bacharach & Mitchell, 1981). Steers (1980) defined structure as the organization of human resources through many structural variations; namely, (1) decentralization (power and authority), (2) formalization (rules and regulations), (3) specialization (departments and positions), (4) span of control (number of subordinates per supervisor), and (5) size of the workplace and the workforce.

2. Significance

Every school system has organizational structures. Sergovanni & Starratt (1988) denote that organizational structures are "those ways by which an organization orders and regularizes the energies of its participants in the performance of its tasks" (p.208). Such order is accomplished by a set of roles that define the function to be exercised and provide a set of expected behaviours necessary to perform functions. The success of a school system in achieving its expectations may vary directly to the type of structure it has. The

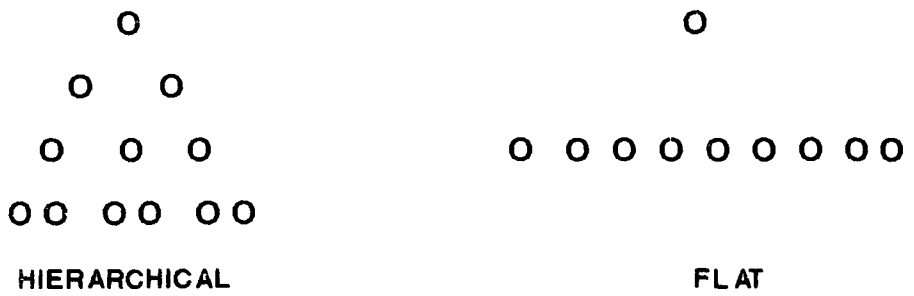
organizational style of the school, its normative culture, its goals, and its leadership all interact with the structure of the school system which so often serves as the boundary that decrees efficiency and effectiveness. Steers (1977) also acknowledged the role of technology (either of a mechanical or intellectual process) and its importance as an interactive partner with structure.

3. Classifications

(1) **FORMAL/INFORMAL**: Achievement by people in their basic roles depends upon the **formal** and **informal** structure of the school system (Cohen et al., 1972). The **formal** structure consists of a hierarchy of educational offices, ranked and characterized by division of labor among positions and followed by numerous sub-units, offices and divisions. Some differentiations of a formal structure are vertical and horizontal; some even geographical (Blau & Schoenheyer, 1971). For example, public school districts are composed of at least five identifiable spheres of interest: the community, the school board, the administration, the physical plants, and the teachers. The sub-systems of the latter three typologies would include the C.E.0 (Chief Executive/ Educational Officer), central office, system departments, school administration, staff, students and the various buildings, units and sub-systems; in sum, the academic, business, and conveyance/ maintenance components that comprise the school district. The **informal** structure is made up of the individual, usually in groups that constitute the work force. It is the differentiations of norms and values among the work force that decree a sub-culture that may often be the structure which actively exercises system authority. Ironically, there are formal structures that are supposed to relate and informal structures that actually relate.

(2) **HIERARCHICAL/BUREAUCRATIC:** Hayman (1975) posits that " school districts tend to be hierarchical in nature" (p.7). **Hierarchical** structured school systems are characterized by multi-layered [(i.e., vertical (top-down)] schema and differentiations, where individuals report to an immediate supervisor who reports to the next authority level. In this division of labor, school districts tend to be **formal** with the superintendent, in theory, at the top and the supervisors, principals and teachers below in a vertical line ... a schema usually diagramed in most educational administration textbooks as a pyramid (Figure 8.7).

Figure 8.7: **Hierarchical and Flat Structures**



School systems may also have **flat** structures consisting only of a few leadership roles which are of level or equal status; consequently, instead of reporting through a hierarchy, individuals of lower status report to top level or someone close to the top. These structures are often classified as **horizontal** where persons are arranged in similar "line" authority and the working processes with others can be reconfigured to cut across vertical boundaries (Bacharach & Mitchell, 1987)

(3) **RATIONALISTIC/RATIONAL**: Sergiovanni (1987) suggests that educational systems comprise a **rationalistic** or a **rational** structure. He defines the **rationalistic** structure as a bureaucratic structure where objectives are short term. Bureaucratic authority usually decrees compliance by or consequences for teachers. The **rational** structure is defined as a **professional** one where objectives are long term. Sergiovanni (1987) explains that the rational approach is more focused on values, openness, cultural nurturing, congeniality, rewards, and teachers' expertise. The rational structure is a disconnection from the classic hierarchical roles to a democractic-professional-community process ... a non-linear schema that involves multiple skills such as peer clinical supervision and collective, facilitating, work groups ... where professionals are in authority, teachers are empowered, and moral leadership and human relations are key components.

(4) **SHARED/COLLABORATIVE:** In the current wave of the education reform movement which stresses school reform or school restructuring, David (1989) posits that researchers and practioners have recognized, that "our education system is not working and, in particular, that strong, formal, central control actually diminishes teachers' morale and, correspondingly, their level of effort"(p.1). On the leading edge of this reform is **site based management**, a management structure which, David (1989) stresses, "designates more authority and flexibility to school staff in the hope that by empowering [them] to create conditions in schools that facilitate improvement, innovation and continuous professional growth" (p.1), positive changes in school systems will result. The interrelationship between restructuring of roles, especially under site-based management, is crucial to developing a

sense of trust in order to establish a credible framework of self-governance.

4. Pertinent Characteristics

The evaluation of the structure component of the **LINC *interactive* Model** automatically implies an appraisal of departmentalization, job descriptions, policies, control, budget process, management systems, and physical plant lay-out. To understand system structure, roles must be examined. Roles differ according to groups, values/norms, and directions. All three can be the basis for conflict; for example, organizational goals of high productivity demands efficient work, yet informal groups may demand the opposite. In the relationships among roles and groups, there is also the differentiation of structure (power, authority, centralization) and role (the individual), which account for shifting equilibriums between organizational effectiveness and individual actualization (Aronstein & DeBenedictis, 1991).

Formal/Informal: An evaluation of the formal structure of the school system would involve an observation of the functioning of the various "stations" represented in the organizational chart and a delineation of such variables as authority, politics, dominant coalitions, etc.(Housego, 1980). Such variables would also constitute some of the criteria in assessing the informal structure of the school system. In evaluating the inner state of the organization, the question may be asked as to whether or not the real policies and objectives of the informal organization differ from the ostensible policies and objectives of the formal structure.

Hierarchical/Rational: Vroman (1985) claims that "hierarchy is natural to organizations" and that without it, the system does not have the ability to organize and accomplish complex tasks or, in the least, that such

ability would be severely limited (p. 293). Such a statement prompts age-old arguments of authority and control, constraints, inflexible structures, and formal, short-term, routine applications to problem-solving and goal management. Goldsberry (1984) contends that the bureaucratic structure of school systems constrain evaluation rather than promote change. Structural differentiation was found not to be a significant actor in bureaucratic control, but relationships to such variables as size, specialization, centralization, and formalization were (Atkin, 1979; Hou, Marsh and Mannari, 1983).

On-Site Based Management, **Rationalistic**, and **Professional** typologies involve an examination of a more comprehensive school structure that fosters democratization, collaborativeness, collegial decision-making, community involvement, empowerment of teachers and staff, and a restructured organizational chart that links to the environment, economy, industry, politics, etc. (Simon, 1985).

In evaluating the administrative structure of a school system, effectiveness constitutes a major standard for judging the operations of the central office and field personnel. Effective performance is directly proportional to effective administrative structure and practice and to how the structure helps or hinders goal attainment. For example, one can examine the extent to which educational administrators engage in activities that contribute to instruction. Again, by using discrepancy (Provus, 1970) or goal-free evaluation (Scriven, 1967) techniques, a determination can be made of whether or not what administrators say they do or what is stated that they do is actually what they do. In any evaluation, a very helpful procedure is the determination of discrepancies that occur between what is expected or designated and what is actually practiced or performed.

The LINC *Interactive* MODEL
N: the **NEXUS** of all organizations
GOALS, ENVIRONMENT, STRUCTURE, and PROCESS

8.9
PROCESS

1. Definition

In organizational effectiveness studies, process is defined as how activities are planned and implemented (Hathaway, 1986); in school system literature, it represents any systemic practices and procedures from instruction to structure (Stufflebeam, 1967, 1971, 1974). The Random House College Dictionary (Revised Edition, 1988) defines process as "a systematic and continuous series of actions or operations directed to some end." Process has many synonyms: transactions (Ingram & Milk s, 1980), transformations (Nader, 1987), or exchanges (Bacharach & Mitchell,1987).

2. Significance

In the taxonomy of components that constitutes a system, process alludes to the very nature of a school system definition; namely, **input-process-output**. This basic systemic framework views the school system as a mechanism that takes **inputs** (resources) from its environment and **transforms** (processes) them through individual and organizational tasks (informally and formally) into **outputs** (behavior, attitude, achievement, etc.). The process of turning inputs into outputs is the reason d'etre of school systems. The determination of process is, therefore, a determination of the operation of the system (Thompson, 1985).

3. Classifications

Process, in the framework of this study, has two distinct classifications: (a) the process of evaluation and (b) the evaluation of school systems processes.

(a) The process of evaluation is the study a school system through particular approaches that are appropriate to the component that is being evaluated. There are many sets of instruments by which to assess effective processes and many methods of gathering information to accomplish this end; namely,

(1) Documentation: regular existing reports, returns, records, design literature, students work, census data, demographic statistics, etc. (Cangelosi,1991; Metfessel & Michael,1981; Sergiovanni & Starratt,1993)

(2) Traditional Approaches: interviews, inquiries, surveys, reviews, briefs, questionnaires, case studies, polls, forums, descriptions, reflections, etc. (Parlett and Hamilton, 1976; Smith, 1981; Schein, 1985; Hathaway, 1985; Williams & Chavkin, 1986; Newton & MacKinnon, 1990, Cangelosi, 1991; Sergiovanni & Starratt, 1993)

(3) Judgements/Expert Opinions (Cangelosi,1991; Sergiovanni & Starratt, 1993)

(4) Student assessments: achievement and ability testing (Kindsvatter, 1989; Davic & Thomas, 1989; Cangelosi, 1991)

(5) Observations/Explorations: meetings, interactions, discussions, videotaping, stakeholders' participation, etc. (Parlett & Hamilton,1976; Smith, 1981, Frestchi & Davis, 1983; Kuzonyn & Collett, 1984; Newton & MacKinnon, 1990; Cangelosi, 1991; Sergiovanni & Starratt, 1993).

As illustrated in Table 8.5, all of the five data sources vary in analysis, usability, cost, involvement for change, and measurement of

performance. For example, questionnaires and judgements are very subjective and costly (depending upon the questionnaire used or the expertise contracted for judgement), yet they offer, in contrast to regular established records, possibilities for indicating justifiable change. Likewise, student assessment is very costly, yet it offers an objective, external and comparative measurement of performance by which to gauge the effectiveness of administrative and instructional processes.

Table 8.5: **Measuring Process and Performance Methodologies**

TYPE	COST	BIAS	USABILITY	INVOLVEMENT	MEASURES
Documentation	Moderate	Objective	Easy	Many	Input/Process
Traditional Approaches	High	Subjective	Easy	Many * (Inputs, Process, Outputs)	All three *
Judgements	Moderate	Subjective	Easy	Few	All three
Student Assessment	High	Objective	Medium	Many	All three
Observation	High	Subjective	Hard	Many	Inputs/Outputs

To avoid subjectivity, it is important to have internal and external evaluators who can explore systemic processes jointly (Schein, 1985). The "profitable" evaluator has a good design, derives excellent data, uses educators as evaluators, and includes alternatives for decision-making (Stufflebeam and Shinkfield, 1985).

(b) The evaluation of school system processes: To evaluate process variables, one can gauge various transactions such as the effectiveness of

administration structure and practices (especially in the delivery of goals), the operation of Central Office, teaching capabilities and performance, student outcomes, development and implementation and examine outcomes (graduates, drop-outs,etc. the satisfaction of the students, parents, employees, post-secondary institutions, etc.).

Researchers' approaches to evaluating school systems processes vary:

(1) Gue's (1985) synthesis of components of the administrative process as identified by fourteen writers, delineates seventeen components of process with which school system administrators were involved, which he arbitrarily proposed could be reduced to seven reasonably identifiable and operationally distinct components: namely, (a) decision-making, (b) organizing, (c) implementing, (d) planning, (e) coordinating, (f) communicating, and (g) evaluating.

(2) Coombs (1986) advocated assessing the process of the system by gauging promotion and finance.

(3) Hathaway (1986) limited the dimensions for evaluating systemic processes to three: (a) governance (including policy making and decision making), (b) instructional development and delivery, and (3) professional development.

(4) Newton and McKinnon (1990) developed a framework which focused on eight dimensions of process: (a) planning systems, (b) budgeting, (c) policy making, (d) decision-making, (e) building and maintenance, (f) implementing and monitoring programs, (g) communicating, and (h) serving the needs of special students ... some of the same components which comprise the **LINC *interactive* Model** and some that comprise particular sections of Nova Scotia school system reviews.

(5) Coleman and LaRoque (.992) delineated a long list of indicators/ variables to gauge school system quality: accountability, instructional effectiveness and improvement, collaboration, professionalism, integration, size, performance data, and, like the components of the **LINC *interactive* model**: **decision making**, response to clients (**workforce**), parents (**environment**), vision (**leadership**), **culture**, and ethos (**climate**).

4. Pertinent Characteristics

(a) The process of evaluation: Williams and Chavkin (1986) refer to the implications of using naturalistic evaluation as a technique to conduct evaluations; that is, describing human processes and using participants as collaborators in the discovery process. Evaluation theorists like Eisner (1979), Patton (1980), Guba & Lincoln (1981), and Stake (1973, 1981) suggest that the naturalistic approach be used as an alternative paradigm because of its qualitative perspective. Such standards as utility, feasibility, propriety, and accuracy are important for judging the quality and credibility of naturalistic inquiries. On the other hand, naturalistic evaluations are time consuming, prolonged in engagement and often generate conflict and negativity. Moreover, the case studies/ reports from such inquiries are usually thick in description and triangular (more than one conclusion) in result.

To assess the processes of instructional development and delivery, Hathaway advocates (a) visiting all classrooms (1-3 hours), (b) having questionnaires completed by principals, teachers, students and parents, (c) distributing a teaching model questionnaire (to be completed by principals and teachers) which will ask the participants how often eleven commonly used instructional strategies [from concept development (divergent

questioning) to personal development (self-esteem)] are used in the school, (d) having teachers also complete a "Program Implementation Questionnaire" concerning the frequency of use of various instructional approaches, (e) interviewing students, individually and in class groupings and (f) analyzing test results and comparing items with similar sized jurisdictions. Schien (1985) refers to such data collecting as systematic observation, checking, application, and reflection. Like Scriven, he emphasizes the importance in any process of exploring hunches, assumptions, surprises; that is, the unanticipated and unintended. Most of the above evaluation instruments of Hathaway (1986) have been followed in the (Halifax County-Bedford District School Board (HCBDSB) Review.

(b) The evaluation of school system processes:

Process in school systems, as defined and exemplified in the **LINC *interactive* Model**, is one of interaction. The process employed obviously depends on how certain components (e.g., leadership, decision making, workforce, etc.) are used to make operational other components as goals, culture, communication, change, etc. For, as posited, process pertains to the operational network of the system and to the implementation of numerous inputs secured from the environment. The question, simply stated, is what does the school system do with such inputs? In other words, how are they processed? What operational techniques are used? (Collaboration? Collegiality?) Is there feedback?

Johnstone (1978) posited that the evaluation of educational systems "must be viewed in requiring a number of considerations which are unique to and different from those appropriate for the evaluation of individuals or curricula" (p. 67). By knowing what a school system is and what

components it contains, Johnstone (1978) defined the system's processes as consisting of two distinct aspects: (a) the provisions and operations of the system itself; that is, how it "works" (interacts and changes) in the realms of policy and resources, and (b) the specific philosophies, projects, or programs developed to implement such policy or to process such resources.

The LINC *Interactive* MODEL
C:
CLIMATE (WORKPLACE), CULTURE, CHANGE, CURRICULUM

9.10
THE WORKPLACE (CLIMATE)

1. Definition

In this study, the workplace is defined in two ways: (1) as location; that is, the internal environment of the physical plant such as a particular building, office or room in which an employee works, and (2) as organizational health or climate; that is, the conditions under which employees work. In contrast to environment (the component which was described as anything external to the school system), Housego (1980) succinctly defined the workplace as the internal state of the organization.

Climate means different things to different people. For example, many writers often confuse climate with culture. The complexity of addressing the workplace as school climate is evidenced by its ambiguous and abstract nature among educational researchers to whom climate means "colour", "tone", "sense", "ambience" (Silver, 1983), "atmosphere" (Weber, 1971; Silver, 1983; Boyan, 1989); "behaviour" (Sergiovanni & Starratt, 1989), "feeling" (Fraser, 1981; Kottcamp, Mulhern & Hoy, 1987), "ethos" (Coleman & LaRocque, 1990), and "perception" (Squires, Haiti and Segars, 1984; Hoy and Miskel ,1991).

2. Significance

Today, the focus of the employer and the employee is on the workplace, in an

effort by both to create an internal environment that for one will bring maximum performance and productivity, and for the other, security and job satisfaction. Socially, environmentally, and professionally speaking, the workplace has superceded fringe benefits and wages in significance. The acquisition and maintenance of a favorable workplace (location and climate) are necessary prerequisites for achieving educational excellence (Sadker & Sadker, 1986; Fris, 1989; Ambrosie & Haley, 1991).

3. Classifications

The definition delineates the two classifications of the workplace: (1) location and (2) organizational climate.

LOCATION: There are many types of locations of the workplace: Central Office, schools, classrooms, staff rooms, etc. These internal environments have vastly changed and depend only upon the leadership of educators who can envision and design schools conducive to all learning domains -- from libraries as the center of the learning milieu to outdoor facilities that promote physical fitness. Since the workplace denotes these actual sites/locations, any evaluation will assess space, equipment, materials, physical lay-outs, proximity, heat and air ventilations, etc., ... all the internal facilities designed for educational services and characterized by their adaptation to age, maintenance, and replacement.

Ten years ago, the Canadian Education Association issued a report (1983) on schools and the workplace in which a record of activities and guides for future action was given for each of the ten provinces. The section of the report that focussed on Nova Scotia mentioned nothing of the need for technological and structural change in the educational workplace. And while

many school systems in Nova Scotia over the past decade have tried to keep pace with the rapid advancement of technology in the workplace, it is incredible how little change has taken place in the classroom compared to vast changes in society.

CLIMATE: There are many dichotomous types of workplaces: open/closed, formal/informal, controlled/ free, positive/negative, supporting /restrictive, rewarding/frustrating, static/challenging confronting/smoothing, competitive/ collaborative, individual/team participative/directed, impersonal/ warm, etc. (Rouk, 1980; Miller, 1981; Hoy and Miskel, 1991). While many such frameworks have been proposed in systems and effective school literature, the climate conceptualizations that are concentrated upon in this study are three: open versus closed, healthy versus unhealthy, and custodial versus humanistic approaches. Three respective measuring devices for these three classifications are the OCDQ (Organizational Climate Descriptive Questionnaire), the OHI (Organizational Health Inventory), and the PCI (Pupil Control Ideology) form.

Open or Closed (the OCDQ): Halpin and Croft's (1963) organizational climate descriptive questionnaire (OCDQ) focuses on elementary schools and endeavours to conceptualize school climate as being open or closed. Using the Likert scale, the OCDQ measures the degree of openness of a school's climate with the perceptions of teacher and principal behaviour being the qualifier. The OCDQ instrument examines eight dimensions of school environment, four of which focus on teacher behaviour (hindrance, intimacy, disengagement, esprit) and four of which focus on principal behaviours (production, aloofness, consideration, thrust). Revisions to the OCDQ by theorists at Rudgers University resulted in the formation of two

separate climate formats, one for elementary schools (OCDQ-RE) and one for secondary schools (OCDQ-RS). What differentiates the OCDQ-RS from the OCDQ-RE is the inclusion of an engagement subtest -- a subtest which measures trust among administrators, staff and teacher, and commitment to student learning and student achievement (Kottcamp et al.,1987).

Healthy/Unhealthy (OHI): A second means of conceptualizing school climate, as described by Hoy and Miskel (1978), utilizes the organizational health inventory (OHI) to determine the overall general school atmosphere. Healthy schools are those which successfully harmonize the technical, institutional, and managerial levels of school responsibility while simultaneously meeting the instrumental (cognitive) and expressive (affective) needs of both teachers and students. Schools deemed healthy within this framework are those which protect themselves from inappropriate environmental influences (e.g.. vested impractical interest groups), establish a high level of staff morale based on teacher commitment to learning and intimate staff relations, and are able to acquire the essential resources (materialistic and human) needed to enrich student learning.

Custodial/Humanistic (PCI): School climate in the workplace may also be conceptualized by ascertaining the dominant control patterns utilized by teachers and principals in disciplining students. The two extremes of the continuum using this framework are custodial and humanistic. Using the pupil control ideology (PCI) advanced by Willower, Eidell and Hoy (1967), school climate is assessed according to the degree of rigidity exercised by the staff and principal. The more rigid the disciplinary measures of a school, the closer to custodial it will rate on the continuum. Humanistic schools, on the other hand, indicate that students learn through positive

interaction and experience. They are student centered.

The literature relative to climate assessment points to a high degree of congruency in the results exhibited by all three methods of conceptualizing climate (Hoy & Miskel, 1978). Regardless of the framework chosen in assessing the atmosphere of a school (whether it be measured with the OCDQ, OHI, or PCI), if a workplace is deemed open by one, then it will also be determined healthy and humanistic, since the three conceptualizations of climate are congruent.

Researchers reveal that favourable (open, healthy, and humanistic) school climates produce (1) positive student attitudes, student achievement, teacher participation, and increased school performance (Brookover, 1982), (2) greater respect for other academic achievers and students staying in school longer (Hoy & Miskel, 1978), (3) greater self-esteem and self-actualization (Deibert & Hoy, 1977), and (4) students with better problem-solving abilities, higher motivation, more task oriented, and more actively involved in school matters (Lunenburg, 1983).

4. Pertinent Characteristics

Aside from the assessment of climate as exemplified in the three methods explicated above, a systematic exploration of the location (workplace) often includes looking at individual styles of behavior (the workforce), roles in organization (structure), leadership behaviour, and overall organizational values, norms, meanings, and beliefs (culture) (Reason, 1980; Miller, 1981). As such, an appraisal of the interactions of the school district, community, school, and classroom components within the workplace with other components such as school climate and satisfaction is important (Keefe &

Kelly, 1985) -- such interaction being the very underlying principle of the LINC ***interactive*** **Model.**

In any determination of the workplace, control is an important variable (Cohen, 1983; Thompson, 1985; Duignan, 1986). Control, in a positive connotation, alludes to the efficient arrangement and management of the school system whereby it can regulate itself. By control, many theorists mean, quite simply the establishing of an organizational climate that is conducive to organizational effectiveness (Shoemaker and Fraser, 1981; Edmonds, 1982; Manasse, 1982; Murphy and Hallinger, 1985; Davis and Thomas, 1989). The most effective schools are those where the climate is positive and the approach to discipline is clear, consistent, fair, and productive (Ingrassia, 1982; McCormick-Larkin, 1985; Blackwood, 1989). Rules, regulations, and guidelines are laid down and clearly understood in a business-like atmosphere that generates a high level of morale in the workplace (Edmonds, 1979; Rosenshine, 1979).

To assist in an evaluation, Patrick and Manning (1991) advocate four key ingredients that can help managers improve the quality of the workplace; namely, the job itself (the employees feel a sense of importance in their job), (2) the work group (teamwork among employees is a key attitude), (3) management practices (management must show it cares for employee welfare), and (4) economic rewards (management must keep the economic rewards fair and individualized).

The LINC *Interactive* MODEL
C:
CLIMATE (WORKPLACE), CULTURE, CHANGE, CURRICULUM

9.11
CULTURE

1. Definition

Culture, a recent phenomena of organizational effectiveness literature, is defined as the shared patterns of assumptions, beliefs, expectations, values, ideas, and norms that shape the behaviors of individuals and groups (Schwartz and Davis 1981,1985; Schein, 1985; Kilmann, 1985). Although there may be some disparity among definitions of school system culture, there is agreement that it is comprised of two dimensions: cognitive and behavior (Conway, 1985). The first dimension includes all the common habits, values, norms, ideas, and beliefs (stated and unstated) of the institution and/or individual The second dimension, and perhaps the more important one, is the behavioral aspect that directly affects the way individuals feel and think about the system and about each other. Mistakingly and unfortunately, culture has often been used synonymously with climate (Purkey & Smith, 1983; Sergiovanni, 1984; Lambert, 1988).

2. Significance

In current writings about organizations, culture occupies a position of extreme importance (Peters and Waterman,1982; Kanter, 1983). Long ignored and neglected, no other component of a school system is more evident today than culture; in fact, culture has become the current buzzword in corporations and

is now recognized as the component that can make or break any corporate strategy.

Culture is the glue that bonds together the other components of the **LINC *interactive* Model** such as leadership, workforce, and communication. It is the social magnet that links together the three general divisions of any systems model for evaluation; namely, the individual, the organization, and the environment. It sustains, it nurtures, and it rewards. It is the pride and the freedom of any school system. It is that identity with which everyone clearly understands what the system is all about -- what Bower (1986) and Sackney (1986) describe as "the way we do things around here".

Schein (1985) asserts that "If any organization is to understand its own strengths and weaknesses, and if it is to make formal strategic choices based on realistic assessments of external and internal factors, it must study and understand its own culture" (p. 138). Culture is a major indicator of organizational change (Beer, 1980). Kilmann (1985) admits that "seeing the organization as a culture had wide ramifications for it means shedding a humanistic light" (p. 81) on school systems and the "shared values and behavior that hold a community together" (p. 92)..

3. Classifications

(a) Sub-Cultures: The sub-cultures of school systems are the independent departments, committees, or groups that are made visible through particular rules, rites, and rituals (Conway, 1985). Each is characterized by a distinct set of beliefs, values, and norms, which may be so different that one group (e.g., teacher and/or student) may not understand the other's perspective (Larocque,1986).

(b) Counter-Cultures: Counter-cultures usually take the form of individual versus institution and group versus group. They are characterized by vested interests and actions, micro-politics, tensions, and desire for control. Such counter perspectives (from staff and school board or from unions and government) account for resistance to community relations, self assessment policies, policy implementations, etc.

(c) Formal/Informal Cultures: Margulies and Raia (1978) recognize two cultures; namely, formal (the organizational ideology: the theme and strategies for behaviour as chosen by the system) and the informal culture (the individual ideology: the set of strategies chosen by the workforce regarding what actually will be followed, practiced, and rewarded. Formal culture delineates the set of ground rules of what is expected by the system. Informal culture decrees to what extent these anticipations will be met by the workforce (Katz and Kahn, 1966). The sets of formal and informal shared values, norms, expectations, etc. are often referred to as **shared culture** (Erickson,1987).

(d) Felt Cultures: A system with a strong culture is easily detected. Its members feel important. As culture begins to take on a fuller meaning, they look at their work differently and are motivated to an expanded sense of identity and a sense of belongingness (Sergiovanni. 1984; Inglis, 1975). The deeply embodied structure of the school system and its values, both overt and covert, are even embedded and felt in the curriculum. A felt culture is often mistaken for system climate, ethos, or atmosphere.

(e) Symbolic culture: A strong school system culture stipulates what the system stands for through symbolic signs as logos, mottoes, or crests. Such symbols remind stakeholders of the major themes

that the school system promotes and exemplifies so that when the name of theschool system is spoken, it is automatically associated with pride in its philosophy and accomplishments. Sergiovanni (1984) and Schein (1985) state that the only thing of real importance that a leader can do is to be a symbolic leader who can create and manage culture.

Sergoivanni (1984), Lambert (1988) and Snyder (1988) report that good schools employ symbol systems that reflect the school culture -- symbols such as banners, stories, buttons, ceremonies, bulletin boards, activities, and events. The symbol system assists in keeping alive the spirit of th system by communicating to those in the school and community the focus of importance at any given time.

(f) Institutional Culture: Schein (1985) observes that the changes and formations of behavioral regularities, norms, dominant values, philosophies, rules, beliefs, and feelings are manifested in institutional culture. Papaleivis (1988), Lambert (1980), and David (1985) assert that school systems, as complex organizations, develop cultures of their own, complete with symbols, rituals, and ceremonies. Synder(1988) and Papaleivis (1988) believe institutional cultures must have **artifacts** (symbols, ceremonies, stories, productions, activities, customs, traditions, taboos, folkways, and mores) that serve as powerful communicators to build commitment to specific purposes and to rationalize and legitimize activity within the school and its environment. It is the way business is handled that both forms and reflects the institutional culture of the system. By implementing reward structures that nurture adult growth and by sustaining the school system as an attractive place, culture can be built within institutions.

4. Pertinent Characteristics

Significant in school system evaluation is the absence of assessment of its culture component. Such a concept would not only reshape the approach and methodology of evaluation, but provide a more thorough assessment. By examining the culture of the system, one is actually examining the dedication, commitment and effort (or lack of it) on the part of the board administrators, parents, teachers and students during the everyday life of the school system.

Reflecting about school systems as cultures can assist supervisors to comprehend in a new and different way how school systems operate and to develop supervisory strategies and behaviour that extends beyond traditional management. While climate encourages contemplation concerning the interpersonal life in schools, culture leads us deeper into the life of the school systems and into the realm of the meaning and significance of the shared values, assumptions, norms and beliefs of a particular school community. Shared cultural beliefs and expectations produce norms that powerfully shape the behavior of groups and individuals within the organization. The more shared beliefs and shared values, the stronger the culture. And such is the key to a successful evaluation -- the understanding of a system's culture ... of "a whole complex set of ceremonies indigenous" to a certain group (Walker, 1961).

Schien (1985) stresses that the components of organizational leadership and organizational culture are intertwined. Leaders can create cultural strengths, nurture effort and initiative, and reinforce beliefs (Sergiovanni, 1984). Pfeffer (1981), Valentine and Bowman (1988), and Adams andBarley (1988) also stress the importance of leadership in building a school system culture through skilled, open communication and modeling

behaviors. Peters and Austin (1986) speak of such leaders as filters of innovations and mediators of change -- adaptive managers who are in constant communication with the environment which, in itself, is often the single greatest influence in shaping a school system culture (Deal and Kennedy, 1982).

Trew (1989) posits that the development of an appropriate organizational culture should begin at the school level, rather than at the school system level, and be predicated upon leadership, change and shared values (Figure 8.8).

Figure 8.8: Trew's Organizational Culture Management Model
[Source: The Canadian School Executive, April, 1989)

Significantly, culture produces a plethora of interrelationships in that it (1) specifies **goals** and values toward which a school system is directed and by how its success and worth is measured, (2) prescribes appropriate relationships between individual and organization, (3) indicates how behaviour should be controlled, (4) delineates what qualities of members should be valued, (5) denotes how members should treat each other

(competitively/collaboratively, honestly/dishonestly, closely/ distantly, etc.), and (6) establishes methods of dealing with the **environment** (exploring, negotiating, etc.).

Levine (1985) purports that strong cultures emerge when administrators have a strong sense of mission, a strong personal style, and an understanding of the internal politics of the system. Numerous researchers (Manesse, 1984; Saphier and King, 1985; Sackney, 1986; Lambert, 1988; Steffin and Sleep, 1988; Faidly and Musser, 1989) posit that a strong system culture aligns with a clear, commmon mission, inspired and committed by visionary leadership and group support. To reinforce common behaviors consistent with the mission, school systems must establish rewards and support systems for teachers, staff and students. Culture is built through the everyday life of the system. Furthermore, the organizational structure of rewards, policies, and controls shape organizational behavior and process.

Many researchers believe in the value of sound staff development programs to build a strong system culture (Purkey and Smith, 1983; Duigan, 1986; Miller & Liberman, 1988; Lambert, 1988, and Rutherford, 1989) but not, as Haycock (1989) reports, by ineffectual faculty meetings or workshops (demonstrations) that have succeeded in changing the behavior of fewer than ten to twenty percent of a group of teachers. The answer to successful staff development lies in joint planning.

The following diagnostic techniques (Table 8.6), garnered from the data given in this section (9.11), provide further analyses by which one may evaluate system culture.

Table 8.6 **EVALUATING CULTURE:**

1.

Study the physical settings of a school system:
Do the buildings and the environment create settings that make a statement? e.g., are they bright, clean, fragmented, consistent, pupil oriented?
Is there a "felt" culture from the ethos, character or atmosphere of the "institutionalized" system?

2.

What does the system say about its culture?
In its annual report, its newsletters, press releases, etc.? Are values embedded in the system components?
Does the hidden curriculum provide for the understanding of individuals and institutions?

3.

Test how the school system and its schools greet visitors:
Formally? informally? Elegantly? Nondescript? For example, is one greeted by a warning that visitors must report immediately to a principal's office? Is the receptionist who answers the phone pleasant? curt? a gate-keeper? Are there "no go" areas -- artificial barriers separating the public and the school per se? Does the school resemble a castle with a drawbridge that is raised up everyday at 9 a.m.?

4.

When interviewing the workforce, ask to be told about the system, its history, and its successes:
Is it growing? What kind of people work here? Are there career ladders? What's the place like to work in? How do things get done? Is there a vision (goals, mission, direction)? Are there shared assumptions, norms, values? How long do people stay in their jobs? What is discussed? Any interesting anecdotes? How do people characterize the system? What is expected? What is rewarded?

5.

Observe how people spend their time for what they do determines what they value:

Is there cohesion? Is information shared within a group? Has that group remained static or changed throughout the years? Is culture used to justify educational strategies, methods, and techniques (e.g. reading and language arts)?

6.

Observe interactiveness:

Organizational culture is interrelated to the three major organizational components of a school system "Environment -- Individual -- Organization. A positive school system culture correlates positively with each component to attain specific and desired objectives. It is manifested by system interactions and contributes to the effectiveness of a school system. Does the school system interact with its environment -- the community and the parents? What is their perception of its image or reputation? (Bier, 1980; Deal and Kennedy, 1982; Milmann, 1981; Erickson, 1985; Hoy and Miskel, 1987).

The LINC *Interactive* MODEL
C:
CLIMATE (WORKPLACE), CULTURE, CHANGE, CURRICULUM

9.12
CHANGE

Definition

Change is defined in the Random House College Dictionary (Revised Edition, 1988) as "to make different the form, nature, content, future course of a thing ... to transform or convert..." When applied to organizational effectiveness studies, Kanter(1988) defines change as "the crystallization of new action possibilities (new policies, new behaviors, new methodologies) ... the design and construction of new patterns, or the reconceptualization of old ones (p. 38).

2. Significance

Today, in all organizations, the central subject is change. The unprecedented evolution of new technologies are transforming the economic, social, and political structures of our society and changing the very assumptions that have dominated our educational bureaucracies for several decades. Gue (1988) acknowledges that, while basic philosophies and practices in education change very slowly, the "rate of change is now accelerating by the month with the impact of new forces and new demands upon the schools" (p.1). A pletoria of "futurists" are warning us that a massive change must take place in our school systems if they are to keep pace with the rapid changes taking place in our industrial societies. These paradigm shifts range from Kanter's (1983) or

Henchey's (1989) warnings of the rapid changes in our structures and cultures to Toffler's (1989) metaphoric "third wave" (from an agricultural to an industrial to an information society).

Of all such forecasts regarding changes in school systems, the prognostications of Naisbett 's (1983) "Megatrends" faithfully predicted significant changes occurring over the past decade; namely, shifts from national to global education, hierarchy to networking, short term to long term "strategic" planning, centralization to decentralization, closed to open systems, and rigid bureaucracy to public participation in innovation and decision making. From the literature of "megatrends", "best companies", and "effective schools", the significance of two major forces underlies the change process being experienced in systems; namely, the value of the **individual** within the organization and the impact **of global competition** -- both of which are beginning to impinge heavily upon the goals of our school systems.

3. Classifications

Larry Cuban (1989) distinguishes **two orders of change**. He defines the **first order** as an attempt to make more efficient and effective what school systems have already accomplished (e.g. special education, individualized programs, fiscal restraint, mainstreaming) and what needs to be more fully developed (e.g., vocational education). Cuban acknowledges that first order changes such as competency teacher tests, graduation requirements, merit pay, etc. may have strengthened the existing structure of school systems, yet, in reality, little has changed. We still have graded curriculum, textbook testing, self-contained classrooms, etc. The only thing that has been altered, according to Cuban, is the vocabulary ("non-gendered",

"audio visual", "child-centered"). The ingredients may have changed, but the soup remains the same.

The **second order** is premised on the desire to alter the fundamental ways school systems have been put together and the ways solutions have been designed. Present day examples of the second order of change would be vouchers, open classrooms, computers, on-site management, and others as enumerated in (Table 8.7). The more important second order changes must come in teachers' behaviors -- in their willingness to alter their role in the classroom, become more involved in the community, accept technology, adapt to cooperative student/teacher relationships, and accept new methods, strategies and techniques of instruction.

Table 8.7 **The Change Syndrome**
New Persuasions/Paradigms

From	To
Industrial Society	Information Societ
Forced Technology	High Tech/High Touch
National Economy	Global Economy
Short Term [Either/Or]	Long Term [Multiple Options]
Centralization	Decentralization
Institutional Help	Self-Help
Representative Democracy	Participatory Democracy
Hierarchies	Networking
Theory Y (Competitive)	Theory Z (Collaborative)

4. Pertinent Characteristics

Change Organizational Culture and Behaviour: Changing the system or any aspect of it, involves changing the people, their behaviors, attitudes and norms; in short, the culture of the school system. When Deal (1985) and Miller and Liberman (1988) speak of organizational and cultural change, they

mean real changes in the behavior of people throughout the organization; for example, nurturing "innovative" teachers who can change the way courses are taught and implement changes in the learning process and "risk-taking" teachers who are not afraid to try something new and hence, by modeling such behavior, can create students who are innovative and "enterprising" (Good and Brophy, 1986).

Change the Leadership: In the management of change in school systems -- whether by environmental infusion, by intent of powerful forces within, or by a collective will of school system participants -- it is important to know how to manage change (Evered, 1980). For school system change to be effective, highly motivated, trained, and reliable personnel are needed (Crandall, Eisman, & Seashore, 1986). The leadership of Central Office administrators and Principals as change agents is imperative and crucial (Wolcott, 1977; Fullen, 1982). While external factors, the expectations of others, and the internal values and beliefs are important to planned educational change, the principal is the key (Leithwood, 1986; Fullan & Newton, 1988). Fullen (1989) was even more emphatic: "Principals cannot start to change the system by changing the system or by changing others around them. To affect change, principals must change themselves" (p.29).

Change the Approach and Focus: The most pertinent topic in addressing the implications of school system change is in the approach to be used. The overriding theme of Fullen's (1982, 1985, 1986) writings is his message that school systems must redirect their focus to an organizational systems approach of program and structure improvements. Educational systems that respond to the real needs of the economy must be flexible and open to change (Our Province, Our Future, Our Choice, 1991). A school

system must, in effect, help people to learn to cope with the inevitability of technological changes that are becoming critical levers by which to judge a system.

Change the Processes and Strategies: Evaluators of school systems should be cognizant of change processes in order to observe and interpret the strategies being employed to foster change within the school system. Fullen's (1992) advice for managing change processes and strategies in school systems comprises eight steps:

- **testing the need and priority of the change,**
- **determining the appropriateness of the innovation to theneed,**
- **clarifying, supporting and insisting on the role of each principal being involved,**
- **ensuring support (e.g. inservice, technical, one-to-one), allowing for redefinitions,**
- **communicating and maintaining support of parents and board, setting up information gathering systems,**
- **having a realistic time perspective.**

Change teachers' attitudes: Any systemic strategy must involve the contributions of teachers because, without their involvement in the change process, any project of any magnitude is doomed to failure. Teachers with highly motivated and resourceful qualities (both in theory and in practice) should be selected to aid in developing long-term plans. Change is much more likely to occur if teachers are interacting during the implementation stages (Howell, 1981; Weiler, 1988; Lawson (1988); Fullan & Newton, 1988). Conway (1984) contends that "the notion that participation is essential to the

acceptance and implementation of change decisions has practically become a law in the literature on educational change" (p.23).

Change the Structure: Fullan (1989) asserts that change in individuals will not result unless changes in the existing school system occur. Moreover, Fullan (1983) submits that "attempts to rationalize the system, specify goals, train participants, and assess outcomes from the top down or the external in are doomed to failure" (p.2). In other words, if change is the result of participation and ownership at the school system level, it will not occur under existing centralized management.

Change Implementation/Determinants of Change: To improve and initiate change in school systems, researchers advocate salient steps to be taken to institute change. They are:

(1) an awareness of what's happening in school systems (Pratt, 1989; Waldron, 1988; Lezotte, 1989),

(2) a need to establish a cooperative vision and a mission for the system (Scarr, 1988; Pratt, 1989; Lezotte, 1989; Pipho, 1992),

(3) a need to develop a sound communication system (Andrews, 1987; Pratt, 1989; Lezotte, 1989),

(4) the promotion and encouragement of teamwork in leadership (Pratt, 1989),

(5) establishing an on-going implementation and evaluation of curriculum (Pratt, 1989; Lezotte, 1989,

(6) initiating organizational and staff development (Jacobson, 1987; Scarr, 1988; Lezotte, 1989),

(7) decentralizing authority (Keefe, 1987; Lezotte, 1989),

(8) activating accountability (Lezotte, 1989; Holmes, Leithwood, & Musella, 1989),

(9) selecting and concentrating on individuals as the means of initiating change (Blum and Butler, 1987),

(10) instituting the findings of effective school research (Gottfredson and Gottfredson,1987).

It is an urgent function of management to make certain that a holistic approach is taken; that is, to involve all components of the school system, interconnected to form a unity of purpose. Such a function is basically the concept of a school system and of the **LINC *interactive* Model**. The holistic systemic approach makes all participants think in relational terms of school systems, i.e., in interrelations between components and not just as an aggregation of persons and things. This holistic approach of school system components recognizes the significance of the institution and the individual and plays an important role in energizing and guiding systemic change (Miller, 1981; Taylor, 1989).

Today, change has become associated with many adaptable and strategic topics. Terms such as risk-taking, creative thinking, self-reliance, team-work, openmindedness, experimentation, self-directed learning, and "enterprising" creativity have become the "buzz" words of educational change of the 1990's.

Barriers to change: Fullan (1988) reveals that "principals receive strong pressures from their staff not to change; in fact, they experience "precisely the opposite -- pressures to maintain stability" (p.13). Schwartz (1992) surmised that "changing others is not possible unless you have their permission and cooperation ... otherwise, [there is] resistance to being changed." (p.17). And, of course, time is a barrier to change processes. Deal (1986) state that, in thinking of change, administrators must allow for enough

time to train individuals, to encourage them to adapt basic ideas for change, and to convey a two way thrust and trust in all matters. After all, all change is not good. It can be disruptive, unsettling, and stressful for teachers to work in an unstable environment. The process of change to be successful, cannot be a linear, step by step process, but must foster flexibility at all times. Adopting mistaken or artificial solutions of implementing proper reforms too hastily, often doom a reform project (Fullan and Miles, 1992).

The LINC *Interactive* MODEL
C:
CLIMATE (WORKPLACE), CULTURE, CHANGE, CURRICULUM

9.13
(D). CURRICULUM (the program)

1. Definition

The Random House College Dictionary (Revised Edition, 1988) provides a very succinct definition of curriculum: "the aggregate of courses of study given in a school". In our school systems, curriculum refers to the program of studies that comprises a compendium of courses for each grade level. Lawrence Stenhouse (1976), in his study of curriculum research and development, defined curriculum as "an attempt to communicate the essential principles and features of an educational proposal in such a form that it is ...capable of effective translation into practice" (p. 4).

2. Significance

Of all the components of a public school program, none is more relative to a school setting than curriculum. Aside from teacher and student behaviour, curriculum is one of the three major components of teaching. (Hunter, 1984). Components such as curriculum and instruction make it possible to monitor the nature, process, and success of a school system (Porter, 1991).

Today the concern with curriculum seems to be its relativity or lack of it, for the major focus of educational reform has been to change curriculum to parallel changes in society. The curriculum of school systems has always come under fire from various segments of society. Coleman

(1966) and Jencks et al (1972) had, in previous decades, analyzed a mass of contemporary data to reach the conclusion that schools made no difference ... that student learning depended on social class environment and not on school programs. In great detail, numerous reconstructionalists (Mann,1975; Apple, 1980a; Goodlad, 1982) have put forth the need for curriculum change, if students are to be able to cope in the year 2000. The futurists referred to previously (Toffler, Kanter, etc.) all warn of future workforces being deprived of the necessary wage-earning skills and attitudes because curricula have not kept pace with change.

3. Classifications

Curriculum may be (1) overt -- i.e., the "regular" curriculum as prescribed by a provincial Department/Ministry of Education in the form of a program of studies that enumerates the objectives and course content of every subject taught in the public schools and (2) covert -- i.e., the "hidden" curriculum consisting of those values and morals that are either inculcated into a particular course/text or initiated by the instructor in his/her program.

4. Pertinent Characteristics

The major purposes of an evaluation of curriculum are to measure content, course quality, skill areas, and attitudes in order to ascertain whether or not the objectives of the program are being met (Pratt, 1989).

Joyce, Hersh and McKibben (1983) posit that the whole area of curriculum must be examined in detail through three stages; viz. (1) refinement (the program and instructional practices that constitute the curriculum of a school district), (2) renovation (examination of every area of

curriculum in detail as strategies, innovation, content, staff input, etc.), and (3) redesigning (examining the developmental and implementing stages of curriculum).

For developing and implementing curriculum changes, Fullan (1986) advises that school systems (1) focus on secondary school administrators and teachers (hitherto dormant in curriculum change), (2) integrate curriculum and professional development in ongoing, short workshops where curriculum can be oriented, coordinated and monitored, (3) offer support and authority at all levels of curriculum implementation and evaluation, (4) empower teachers (the actual facilitators of curriculum change), and (5) maintain persistent and continuous evaluation, reflection and action.

The usual approach practiced in the assessment of curriculum follows a pattern that can be tersely represented as:

DEVELOP - IMPLEMENT - EVALUATE - REVIEW - IMPROVE

The emphasis seems to be more on implementation than evaluation. Continuous and cyclical feedback, from both a theoretical and practical viewpoint, are essential to the effective evaluation of curriculum (Kindsvatter et al., 1988; Anderson, 1989). While curriculum goals, policies and evaluation processes are still important, Nowakowski et al (1985) posit that school systems are beginning to concentrate more on a student's emotional, physical and social maturity and well being than on textbooks or test scores, and appropriate curriculum goals.

In most classrooms of district school systems in Nova Scotia, distributed to each teacher are three basic publications that establish the basic guidelines for curriculum. They are the PSP (Public School Program), curriculum guide(s) from the Department of Education, and the local school

board syllabus (usually produced by members of each school department). A supervisor of curriculum initially measures the input and process (programming and implementation) of a specific discipline/course by these three standards. And if a particular supervisor is astute, he/she, in an Eisnerian mode, will observe students carefully -- particularly the student's participation in discussion, questioning, problem solving, critical thinking, etc., and in seat work for a perusal of students' workbooks is sometimes more enlightening re instruction, expectations, program, etc. than observing teacher behavior in the classroom. In many instances, an evaluation of a student's work ethic, processes, and product can serve as an adequate evaluation of curriculum and instruction. Mann (1975), Apple (1980b), and Goodlad (1982) advocate the inclusion in the curriculum of critical thinking, problem solving and divergent questioning skills, and the necessary technological expertise and global awareness insights.

The major concerns that pertain to the establishment of and improvement in curriculum/programs as measured by their frequency and prominence in all of the Nova Scotia reviews and numerous evaluation handbooks and workbooks are:

(1) **Long-term planning** (identifying the inservice goals and priorities re curriculum development, implementation, and evaluation),

(2) **Establishing district-wide curriculum committees,**

(3) **Alignment and Coordination** of school system curriculum with the Department of Education objectives (PSP) and guides in order to promote system consistency,

(4) **Professional Development/Inservice**

(5) **Coordination among teachers** of programs, practices, evaluation policies,

(6) **Leadership in all** aspects of curriculum development, implementation, and monitoring,

(7) **New curriculum directions**

Specific curriculum concerns that have been recurring over the past decade include: French programs, use of Concrete Math materials, role of guidance and testing programs, Special Education manuals containing policies re placements, assessments, policies, etc. and Language Arts (objectives, skills, writing, grouping, approaches, etc.).

Quality assurance, the major assessment device used in hospital evaluations and industrial organizations, is now being adapted to educational programs (Collins, 1990). Standards and given criteria relative to costs, efficient use of resources, and the rendering of efficiency and effectiveness have been inculcated into a quality assessment of programs and services.

Obstacles to curriculum development are money, quality time, lack of commitment, and lack of expertise (Bradley, 1985). Carter (1984) pointed out, however, that curriculum and programs were still constrained by the autonomous choices of the classroom teacher.

CHAPTER IX

APPLYING the LINC *Interactive* MODEL to NOVA SCOTIA SCHOOL SYSTEM EVALUATIONS

Introduction

In this chapter, the components of the **LINC *interactive* Model** are applied to **three** of the many school system reviews performed in the school districts of Nova Scotia (1979-1991); namely, the Northside-Victoria District School Board (hereafter referred to as the NVDSB), the Dartmouth District School Board (hereafter referred to as DDSB), and the Halifax County-Bedford District School Board (hereafter referred to as HCBDSB). In examining these three reviews, the writer will not be looking at the actual results of the reviews, but rather the use of certain evaluation aspects of in each of the reviews.

These three school system evaluations have been chosen because the writer was, respectively, (1) the C.E.O. of the NVDSB when the evaluation of the school system (1985) was conducted, (2) a consultant for the implementation of the findings of the DDSB School survey (1989), and (3) the lone provincial external evaluator for the HCBDSB evaluation (1991). Moreover, it was in the latter school system review that a "down-sized " version of the **LINC *interactive* Model** (seven of the thirteen components) was first tested.

Whereas the major purpose of this chapter is to test three of the Nova Scotia school system reviews against the **LINC *interactive* Model**, an overview of the pattern and practice of these Nova Scotia school system reviews, as conducted by the Department of Education will be first presented.

PART I

The Nova Scotia School System Evaluations

Background

From 1979 to 1991, twenty-six school system surveys, all at the formal request of local school boards (although some provincial pressure was discretely employed), were conducted in Nova Scotia. A consistent pattern for administering these surveys evolved throughout these years: all were organized and conducted by the Department of Education, all, except two (the DDSB and the HCBDSB) were external, and all followed a changing and improving methodology. The DDSB (1989) and the the most recent and last review, the HCBDSB (1991), were internal-external educational audits. The format of the sole school survey preceding these twenty-six external reviews was an internal-external assessment (1977) undertaken by the Kings County Amalgamated School Board.

The Evolution of Nova Scotia School System Surveys

The report of the Nova Scotia Royal Commission on Education, Public Services and Provincial-Municipal Relations, tabled in 1974, set the stage for school surveys inaugurated by the Department of Education in 1979. The Graham Report (as the Royal Commission Report came to be called), consisted of three voluminousaccounts, with Volume III (Chapters 36-46) dealing solely with education. The report approached principal questions on matters that the three man commission considered important for the future direction and operation of the Nova Scotia educational system.

In great detail, the Graham Report (1974) advocated that "the performance of the schools must regularly be monitored and evaluated in

relation to the educational progress of the student" (Vol. III,Chap, 39. p. 21). Realizing that educators would debate the feasibility of such a goal for a multiplicity of reasons (external influences, subjectivity, range of students' intellectual abilities, etc.), the commissioners proposed that the "educational system [be] carefully monitored and evaluated on the basis of its results rather than on the extent of its operations." (Vol. III, Chap. 39, p. 34).

The commissioners acknowledged the reluctance of educational authorities to undertake a systematic assessment of a school system and to rely too often on the enumeration of services it offered to students. Moreover, the Commissioners cautioned that it was more important for schools and school systems to identify the benefits accrued by each student and to demonstrate the successful accomplishments of its efforts than to remain passively or defensively acquiescent. Undoubtedly, school systems would prefer to be assessed on the basis of such factors as the number of professional staff, the availability of learning resources, the condition of school buildings, the variety of programs -- on what is put into the system rather than what is put out!

Among the techniques and methods advocated in the Graham Report were:

> ■ standardization and objective testing in order to obtain reasonably valid and useful indicators of student competency in language and mathematical skills, their acquisition of the basic cognitive concepts necessary for understanding themselves and their environment, and of their development of originality, imagination, inference and moral judgement .... administered at least three times throughout a student's career (6-9-12) in order to test the achievement of curriculum goals, \the effectiveness of programs, and the progress of the student, (GR III, Chap. 42, pp., 62-63).

> ■ evaluation by an external authority of the aims and goals of a school system, the nature and level of programs and services provided, the administrative and organizational procedures established, and the effectiveness and efficiency of its operations (GR III, Chap 43, p.15).

The Graham Report (1974) recognized that school systems had to be evaluated by professionally competent persons who, by direct observation, could assess the relevance of school objectives, determine the success of schools programs, and discern the true operational effectiveness of a school. In 1974, local and provincial supervisory personnel were attempting to make such assessments but with little success. These individuals were already greatly involved in their own responsibilities of determining programs, providing consultative services, organizing in-services, and developing methods and practices. The commissioners astutely concluded that the task of these supervisors would be made more difficult and their work less effective if they were combined with the responsibility of evaluation. Paradoxically, they would be evaluating their own performance (Vol III, Chap. 42, p. 65).

For a "most reliable" evaluation of school effectiveness and to have a "truly responsive school system", the Graham Report (1974) advocated that provision be made for "periodic evaluation and monitoring of schools and school systems under the direction of competent, experienced professional people who are not directly employed or responsible to either local school authorities or the Department of Education and who have neither administrative nor service responsibilities within the school system" (Vol. III, Chap.42, p. 66). Excluded as evaluators by the Report were teachers, principals, administrators, and regional or provincial officials directly

responsible to local or provincial authority since they were already involved with delivering educational services in or to a given school jurisdiction. The Commission also dismissed task forces, provincial educational committees and consultants, and, in a facetious vein, even Royal Commissions! Advocating a widespread desire for a new and a more effective means of regularly and reliably monitoring and evaluating the performance of a school system, the Graham Report (1974) recommended "the establishment of the Nova Scotia School Commission to perform these essential functions" (Vol. III, Chap.42, p. 66).

In a period of rapid social and technological change, this permanent body would assume responsibility for maintaining continual examination and review, for recommending appropriate and fundamental changes, and for keeping close contact with all people involved in the education process. Conscious of the importance of good school performance to students, parents, and society as a whole, and of the high cost of education to the municipal and provincial governments, the Royal Commissioners substantiated their recommendation of a semi-autonomous and non-political body that could proceed "without fear of favor and without personal and professional interest in the results" (Vo.III, Chap. 43, p. 17). While not responsible for the provision of educational services, the Nova Scotia School Commission would examine goals, programs, finances, performance, staff, services, schools, students, etc., "using the most reliable objective measurement techniques and the best professional judgement available" (Vol. III, Chap.39, p. 22). The task defined by the Royal Commissioners was to develop a structure that would provide for provincial control of educational goals and purposes. Their recommendation was the establishment of a Nova

Scotia School Commission that would conduct a "semi- independent provincial evaluation of the schools, school systems, and the Department of Education" (Vol. III, Chap. 43, pp. 10-11, 18-19).

That the recommendations of the Graham Report were not adopted is now a matter of history. The many political and educational reasons that negated its adoption are secondary to the incidental philosophies and practices, promulgated by the report, that have been promoted in different variations over the past nineteen years. During the "golden age" of the 70's, when many school boards were greatly involved in school construction, the Nova Scotia Department of Education (especially its School Plant Planning Division) was often requested by local boards to conduct facility surveys to identify, through short and long term planning, a system's priorities and needs. One example was the Richmond County School Board which had a facility study performed in 1974 under the leadership of Hugh Noble, Director of Inspectional Services and one of his regional Inspectors, M.J. Woodford. So practical were these surveys, so prevalent the new emphasis on accountability, and so current the "fall out" from the Graham Report, that a few boards eventually requested the Department of Education to conduct a survey on all aspects of their operations (Carter, 1989).

Five years after the reception of the Graham Report, the three boards in Queens County (Liverpool, County of Queens, and Liverpool Regional High) formally requested the Department in 1979 to conduct a comprehensive survey of their school systems. These evaluations formed the impetus that resulted in more than twenty external school system surveys (13 Local and 13 District) being completed between 1979-1991 [Table 9.1 (a) and (b)].

Table 9.1 (a): School System Surveys/Reviews in Nova Scotia 1979-1991

Name of Board "LOCAL"	Number of Schools	Number of Students	Number of Recommendations	Last Month On-Site	Year Report Issued
Liverpool Board of School Commissioners*	3	521	34	Dec. 1979	1980
Municipal School Board of the County of Queens	10	1.710	32	Dec. 1979	1980
Board of Trustees of Liverpool Regional High	1	644	30	Dec. 1979	1980
Chester Municipal School Board	9	1,983	82	Dec. 1979	1980
Guysborough Municipal School Board	9	1,710	120	Dec. 1979	1980
Municipal School Board of the District of Clare	9	1.960	38	Nov. 1980	1981
Municipal school Board of the District of Argyle	7	1,888	40	Nov. 1988	1981
Board of Commissioners of the Town of Glace Bay	14	5,133	41	Dec. 1980	1981
Board of Trustees of Middleton High School, and Middleton Regional Elementary School	2	951	51	Feb. 1981	1981
Municipal School Board of the County of Pictou	13	5,334	118	Feb. 1981	1981
Municipal School Board of the County of Annapolis	13	1,920	42	Feb. 1981	1981
Municipal School Board of the County of Antigonish	12	3,084	94	Apr. 1981	1981
Board of Trustees, Antigonish Regional	1	1.256	47	Apr. 1981	1981

(* Transportation Review only)

Table 9.1 (b): School System Reviews in Nova Scotia (cont'd)

1979-1991

Name of Board "DISTRICT"	Number of Schools	Number of Students	Number of Recom-mendations	Last Month On-Site	Year Report Issued
Richmond District	17	3,104	79	Dec. 1981	1981
Digby District	9	2,600	134	May 1982	1982
Hants West District	9	3, 622	136	May 1983	1983
Inverness District	19	5,194	132	Oct. 1983	1983
Shelburne District	13	3,472	87	May 1984	1985
Northside-Victoria	28	7,759	159	Nov. 1984	1985
Yarmouth District	11	3,337	107	Apr. 1985	1985
Cape Breton District	76	20,768	184	Dec. 1985	1986
Halifax District	39	14,929	230	Dec. 1986	1986
Cumberland District	23	6,546	155	Oct. 1987	1987
Dartmouth District	30	11,201	245	Apr. 1988	1988
Lunenburg District	25	8,326	122	May 1989	1989
Halifax County-Bedford District	78	30,123	95*	Sept.1991	1991

Curriculum/Program was not assessed

Scope:

Although the categories may have varied since 1979 for the twenty-six surveys that have been completed, the Nova Scotia Department of Education has essentially adopted the format used in the Cumberland District School Review of 1987-88. The major areas addressed in that particular survey have become the adopted classifications for Nova Scotia School Reviews as well as for

evaluation analyses by the Department of Education. As a result, the external survey is generally concerned with four significant divisions consisting of eleven specific components, each of which, along with the corresponding component of the **LINC *interactive* Model**, is given in Table 9.2.

Table 9.2 :

CUMBERLAND DISTRICT SCHOOL BOARD REVIEW	LINC *interactive* MODEL
A. BOARD(1)	Leadership, Structure
PROFESSIONAL STAFF (2),	Communication, Goals
FINANCE (3) MAINTENANCE (4) TRANSPORTATION (5),	Workforce
B. CURRICULUM/PROGRAM	
(Regular [6],Special [7], Adult [8] > P-12+] 13.	Curriculum
C. SUPPORT STAFF (9),	Workforce
D. STUDENTS (10) and DEMOGRAPHICS of SCHOOLS (11).	Workplace (location)

[LINC components missing: Decision-Making, Interaction, Process, Environment (except in the case of presentation of public briefs), Culture, Change, Climate. A more detailed comparison of Nova Scotia School System Reviews and the LINC *interactive* Model is given in Table 9.4]

These eleven classifications formed the basic areas for evaluation unless one or more, through mutual agreement with the Board of the system being evaluated and the Department of Education, were not to be considered. In the DDSB Survey (1987-1988), the transportation system was not evaluated by the external evaluation team. Since a separate and extensive review was already in progress, both parties agreed that an external survey of this area was unnecessary. The DDSB and the CDSB (Cumberland District School Board evaluations were classified as "reviews" rather than "surveys" in order to emphasize their departure from the assessments conducted between 1979 and 1987.

As well as stabilizing the above format for school system reviews, the CDSB review (1987) also introduced specific changes into the design and process of the Nova Scotia school system evaluations Among those of most significance, were:

a) creating a support team to promote participation by the system

b) reducing the amount of time consumed from the days of visitation to the day the final report is presented by agreeing that evaluation team chairperson and the team leaders would perform only their most essential duties, thus allowing for more participation and responsibilities by the support team. As a result, only four months elapsed from the first day on-site (September 28, 1987) to the day the CDSB evaluation.report was presented (January 28, 1988)

c) ensuring that the recommendations were given due consideration, an action team was formed to organize proper and meaningful implementation into the district's operation. The action committee classified each recommendation by using code sheets which indicated the status, responsible implementor, and time frame of each recommendation. (Similar formats for implementation were adopted by the NVDSB, DDSB, and HCBDSB).

The format adopted for the CDSB Review, therefore, reduced the length of the process, increased the participation by board staff in pre-review events, and ensured incorporation of the recommendations into the system by instituting an implementation action committee.

Comparison with the LINC *interactive* Model

The only similarities between Nova Scotia school systems evaluations and the

LINC components are: **Structure, Workforce, Communication, and Curriculum/ Program** (see Table 9.4). Some of the other components are only alluded to in the above four divisions for N.S. School Systems evaluations; for example, **leadership**. Leadership is discussed in the NVDSB review, but only to the extent that it applied to three Central Office Supervisors, and, like all of the other twenty-seven surveys, there is no mention of the component as it may apply to other administrators, especially Principals. In the DDSB evaluation,for example, leadership is omitted entirely ... likely due to the fact that the internal review was done by evaluators who comprised over 90% of the school system professional staff.

Furthermore, while **structure** may be alluded to in reference to the number comprising the Board and Administrative staff, there is little reference to any organizational chart except, of course, in the HCBDSB, where components of the **Linc *Interactive* Model** were first introduced. Again, in the Nova Scotia school system reviews, **goals** are implied only in an analysis of the Board and its senior administration. **Environment** is to be found usually in the appendices of certain reports; for example, the NVDSB review that includes a compendium of briefs presented at a public meeting. **Communication** may be mentioned in Nova Scotia school system evaluations, but usually in the context of the need for more tangible reports to the public. In the HCBDSB evaluation report, components the **Linc *Interactive* Model** were given a priority for reasons already mentioned. Many components of the **Linc *Interactive* Model**; namely, **interaction, change, process, culture, decision-making, and environment** were not part of the N.S. School Systems reviews.

As an example of the portions of an evaluation report given to

specific components of a school system in Nova Scotia School System reviews, Table 9.3 serves as a typical example of the components reviewed and the "weight" given to each. The major similarity between the Nova Scotia school systems reviews and the **Linc *Interactive* Model** is the component: **curriculum/program** This component comprises the bulk of all of the twenty-six reports of the Nova Scotia School System reviews. To illustrate this point, an outline of the NVDSB report is given in Table 9.3. Notable is the fact that the component, **curriculum** constitutes 51 of the 178 (approximately 30%) pages of the report as well as 86 of the 159 (approximately 55%) recommendations. A complete comparison of the **LINC *interactive* Model** and the N.S. School system reviews may be found in Table 9.4.

Table 9.3: Northside-Victoria School System Review, 1985.

Chapter	Component	# of Pages	# of Recommendations
1. Introduction		0	0
2. Administration & Organization		13	7
3. Finance		13	19
4. Programs & Curriculum		51	86
	(a) Special services and programs including student services (guidance organizations, progress of pupils etc.)	18	23
	(b) School Library/Learning Resource	4	5
5. Transportatio		6	8
6. Property Service & Maintenance		33	11
7. Board and Senior Staff	Briefs, including utilization of facilities, staffing, French Education, etc.	27	0
8. Appendices (N.S. Achievement Tests)		10	0
TOTAL		178	159

Table 9.4: Comparison of the components of the LINC *interactive* Model with Nova Scotia School System Reviews.

(Comparison does not take into account similarities in the HCSDSB evaluation]

LINC Component	Nova Scotia Reviews
L: Leadership	Mentioned in 61% (17 of 28 Reviews) but only as a recommendation for leadership in currriculum. Exceptions: 3 Central Office Supervisors in the NSVDSB;Central Office Adminstration in Chester survey.
Communication	From the Board or C.E.O. perspective only & briefs from interest groups.
Decision-making	Constant recommendation in 93% (26 of 28). For (a) S.O.P's (Standard Operating Procedures, (b) Established accounting pratices,collaborative involvement in budget.
I: Individual (Workforce)	NO. Central Office personnel only
Interaction	NO
N: Goals	From a board perspective only. 19 of the 28 reviews found no evidence of written goals.
Environment	NO, only in reference to submissions made by public groups
Structure	NO, but incessant recommendations in 25 of 28 systems (89%) for job descriptions and in 23 of 28 (82%) for supervision & evaluation.
Process	NO
C: Workplace (Climate)	From the LOCATION point of view only; i.e., demographs (size, heating,etc.)
Culture	NO
Change	NO. Many recommendations for regulations and policies, techniques and methods, etc., none re restructuring or change process.
Curriculum	YES. Forms the "bulk" of all evaluation

In reviewing each of the twenty-six school reviews conducted in Nova Scotia from 1979-1991, the curriculum component constitutes the "bulk" of those school system evaluations. A further example of this emphasis on evaluating program can be seen in the Cape Breton District School Board survey report (1986) that comprised 504 pages -- 145 of which were concerned with "Programs and Curriculums". Of the 184 recommendations made regarding the Cape Breton District school system, 105 pertained to curriculum. "Curriculum and administration are the two major concerns. You can't separate the two" (Nicholson, 1989)

Comparisons to Other Models

The internal and external format used in the HCBDSB and the DDSB reviews resembles greatly the Ontario Ministry model CEDSS (Cooperative Evaluation and Development of School Systems, 1983), developed through experience garnered by survey teams and researchers over ten years of study. Implemented to address the issue of accountability and "to provide information on the strengths and weaknesses in the educational system" (p.2), CEDSS's major function, aside from evaluating a school system, is to issue recommendations that will effect improvements through developing system planning and effective decision-making.

The CEDSS model includes two major activities: evaluation and development. It is a flexible, rational, and clearly defined model. The model has many operational stages, evaluation components, and developmental facets. What is of interest, however, to this study of school surveys in the Province of Nova Scotia are the basic components and characteristics of CEDSS that are similar to the internal and external (in bold print) processes

used in the DDSB and the HCBDSB reviews:

a) INITIATION **Letter from school board to Minister requesting school system survey. Project published in the community.** Participation elicited, **Minister appoints chairperson**, board appoints internal evaluation chairperson and designates member of senior administration staff as responsible for facilitation of model,

b)INTERNAL EVALUATION of selected areas of school system involves parents, school board members, staff, community, and students,

c) EXTERNAL EVALUATION **An external survey team visits the school system to assess certain areas;**

d) COOPERATIVE REVIEW MEETING Chairpersons of internal and external evaluation teams meet to exchange and discuss findings ,

e) FINAL EVALUATION REPORT **prepared by the chairpersons from all reports and presented to board;**

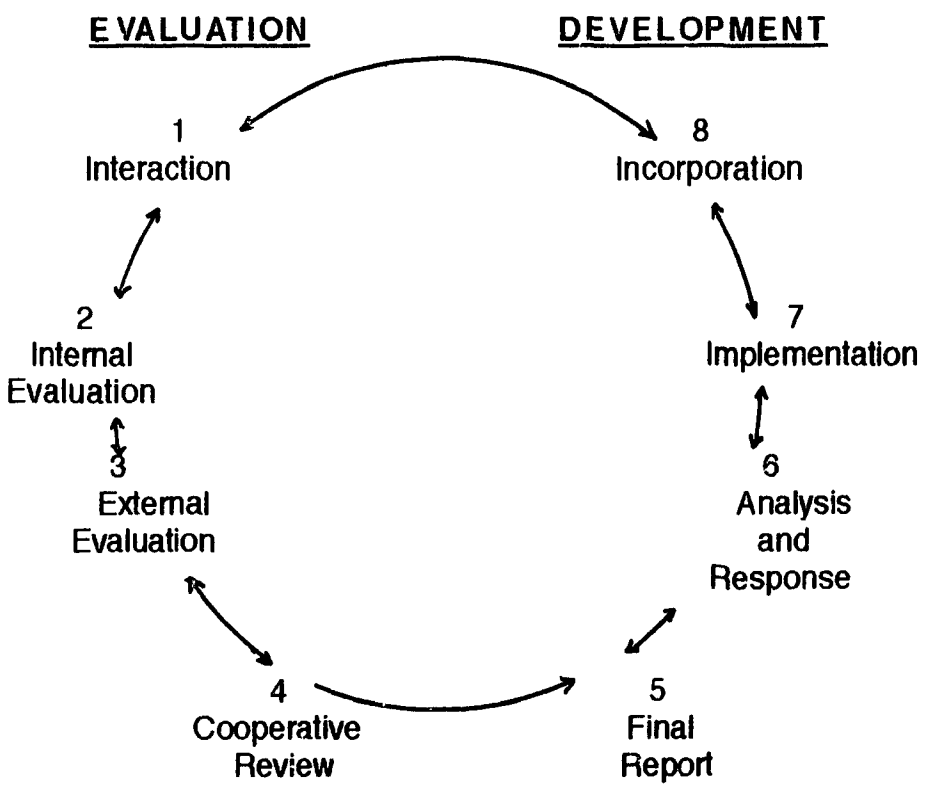
f) ANALYSIS AND RESPONSE a committee is appointed to analyze the report and to make recommendations for implementation,

g) IMPLEMENTATION **a monitoring committee, representing school system personnel is appointed to make certain that recommendations are implemented**,

h) INCORPORATION a senior board official [(actively involved in (f) and (g) recommends incorporation, rejection, or revision of programs]

These eight stages of the CEDSS model are illustrated below:

Figure 9.1: The CEDSS MODEL



PART II

APPLYING THE LINC *INTERACTIVE* MODEL TO THREE SELECTED SCHOOL SYSTEM EVALUATIONS.

Format

As mentioned in the introduction to this chapter, the **LINC *interactive*** model will now be applied to selected evaluations of Nova Scotia School Systems conducted between 1978-1991. The application (9.1-9.13) will adhere to and match the formatted sections and checklists (8.1-8.13) of each of the thirteen components of the **LINC *interactive* Model** that comprised the previous chapter.

The components of the **LINC *interactive* Model** will be applied to **three** of the many school system reviews completed in the school districts of Nova Scotia (1979-1991); namely, the Northside-Victoria District School Board (NVDSB), the Dartmouth District School Board (DDSB), and the Halifax County-Bedford District School Board HCBDSB). As mentioned previously, these three school system evaluations have been chosen because the writer was, respectively, (1) the C.E.O. of the NVDSB when the evaluation of the school system (1985) was conducted, (2) a consultant for the implementation of the findings of the DDSB School survey (1989), and (3) the lone provincial external evaluator for the HCBDSB evaluation (1991).

As the chief external evaluator of the HCBDSB Review (1991), it is not surprising that seven components (**Goals, Environment, Structure, Leadership, Workforce, Decision-Making, Communication)** of the **LINC *interactive* Model** were specifically used and that the other six components (**Interaction, Process, Work Place, Culture, Change,** and

Curriculum) were alluded to in various other sections of the report. In the HCBDSB evaluation, emphasis was placed on three major components of organizational effectiveness; namely, the organization, the environment, and the individual. Individuals, it was posited, should possess three major and interrelated abilities: leadership, communication, and decision-making -- the three components that comprise the "L" of the **the LINC *interactive* Model.**

The Linc *Interactive* MODEL

(L/C/D) = LEADERSHIP, COMMUNICATION, DECISION-MAKING

9.1
LEADERSHIP

Applications To/Examples In Three N.S. School System Reviews

In applying the various leadership classifications and characteristics already alluded to in the preceding chapter to the **leadership** content of the HCBDSB review, it was noted that all of the many stakeholders interviewed in that evaluation process, indicated the need for strong leadership in every facet of school administration and, more particularly, the importance and value of facilitating **instructional leadership**. From general observations and conversations with the teaching staffs and, more particularly, from school questionnaires submitted by the internal evaluation committees, the HCBDSB review team became aware that teachers had concerns regarding the lack of **instructional leadership** in curriculum. Seventeen of the twenty-three teacher committees which participated in the evaluation, asked for leadership in curriculum -- more expressly, for someone to take the responsibility for

developing, implementing, supporting, and monitoring educational programs.

The dichotomy (managing vs. leading) in the definition of leadership, especially as it applies to **TO (Task Oriented) and IO (Individual oriented)** leadership, was also addressed with the evaluators concluding that persons in supervisory positions must not only perform management functions but also must provide leadership. The evaluators recommended that sub-system supervisors assume a more **proactive leadership** style. Such a conclusion is similar to the response to the report of the Select Committee on Education In Nova Scotia (1992).

The evaluation team strongly recommended that the board establish procedures to foster **collaborative** and **humanistic leadership.** The necessity for central office supervisors to provide **visionary** and **transformational leadership**, for school principals to act as educational leaders, and for supervisors to serve as facilitators (i.e., for **comprehensive leadership**) was reiterated frequently. Leadership style and behavior cut across all dimensions of the system. Both were interrelated and interconnected -- especially with organizational culture since it is the **cultural leader**, with his enthusiasm and with his promotion of symbols, beliefs and slogans, who can make a major difference in a school system. Effective influence of a leader springs from healthy relationships of mutual trust and respect with his/her subordinates --- qualities of **moral, transformational, and human resources leadership**. Such particular comments were re-echoed by principals of the Halifax County-Bedford District School Board regarding their senior administration staff (HCBDSB Review, 1991). Conversely, a desire that they be more visible (e.g., in touch, listening, innovating, caring, reinforcing, monitoring, etc.) both in schools and at

principals' meetings throughout the year [i.e., MBWA (Management By Walking Around) (Peters and Austin, 1985).

In the DDSB Review (1988), one of the "main focuses" and "possible priorities" of the seven major committees of the cooperative review undertaken in April, 1987, was the System Administration Survey. It is, however, when one delves below the surface of the report that one questions the superficiality of the Review, particularly the section concerning the leadership of System Administration. Checking the involvement of over 100 teachers and lay persons in the review process, one discovers, after a full examination of the numbers of lay persons who participated, that there were only six involved. In revelations such as this, the review begins to assume the nature of a "whitewash" in that the evaluation was of professionals by the same professionals. Not surprisingly, the assessment of all professionals, including the leadership characteristics of the supervisory personnel, is very positive. As Alice Hale in an interview in April, 1988, commented, "One major reason we did the internal report was to have our say".

In the NVDSB Review (1985), the question of leadership centered mainly on the work of three curriculum supervisors located at the Central Office of the Northside-Victoria District School Board. These supervisors felt that the school system review gave them an unjustifiable negative reflection because the report had been "hastily gathered, opinionated and selectively chosen" (Memo to Superintendent, 1985). Criticisms of their leadership were based on an appraisal of their job descriptions and their lack of instructional leadership by not establishing teacher curriculum committees or organizing teacher inservices, and by not

being visible to teachers. Their counter action was based on the reality that their curriculum duties as secondary school curriculum supervisors were not always deemed as the highest priority in that many "management" duties, other than curriculum, occupied their time.

It is interesting that in all of these reports , the question of leadership in school systems is never applied to principals, although they comprise the greater percentage of educational administrators in any school system. Evidently in N.S. School System reports, as well exemplified by the DDSB and the NVDSB reviews, principals are immune from any appraisal.

9.2
COMMUNICATION

Applications To/Examples In Three N.S. School System Reviews

1. **Being committed to open channels of communication.** The desire for better communication has been echoed in all N.S. school system reviews. In the NVDSB Review, the number one concern was to have information communicated regarding curriculum development and implementation. The general observation from Nova Scotia surveys is that staff meetings are often "telling sessions" where information and decisions are passed on without staff input. In the HCBDSB, DDSB, and NVDSB, attempts are being made to move away from the usual administration/ information-giving/ monologue types of meetings to those characterized by open dialogue, collaboration, PD segments and clear, articulate messages -- that is informal school(s) based scenarios where principals and/or staff set the agenda.

2. **Being accessible.** Do senior administrators visit schools? In the NVDSB

survey (1985), a very specific criticism by teachers (especially those 100 miles away from Central Office in the sub-system of North Victoria), was that they never saw a supervisor from October to May. The very nature of central office support, said the HCBDSB teachers, required a visit by senior administrators (HCBDSB Review,1991).

3. **Being approachable.** In the HCBDSB Review, references were made to the need for improved consultation and a system wide public relations approach. A widely held perception in the HCBDSB and NVDSB school reviews is that not all leaders are approachable, that is, willing to listen before saying "no". From a review of the Nova Scotia system surveys (1979-1991), there is an array of comments about inconsistent approaches to communication by senior staff and schools. Conclusions in most of these surveys point to the need for consistent messages and practices and for clear, explicit communication "feedback" patterns. The Nova Scotia surveys indicate that communication is still basically formal.

4. **Being responsive to the concerns and aspirations of others.** In district school boards, there are a number of occasions where staff meetings do not respond to the concern and aspiration of the members. A review of district level curriculum initiatives at the HCBDSB and NVDSB revealed that extensive time for planned evaluation and feedback about one project (especially before initiating another) was often lacking. School systems, it was felt, should develop a feedback mechanism to identify and process the concerns and aspirations of persons developing and implementing educational programs.

There were, however, some positive comments in the HCBDSB Review Report (1991) that indicated how some sub-system supervisors were

conducting principals' meetings in a way which showed concern for involvement, open dialogue, and the collaboration of others. Another example is to be found in the creditable communication efforts of the Board and its staff to trustee groups.

5. **Encouraging mutual trust.** The consensus from the N. S. school surveys was that, although most teachers felt that communication in their schools and system was "pretty good" (especially among students, staff, parents and local administrators), they were critical of external administrators not being receptive to their concerns (e.g., discipline), and not being partners in education (i.e., no consultation). The lack of communication seemingly was translated by principals of the HCBDSB into a lack of trust. Not surprisingly then, staff relied on the grapevine for their information. The trivial, they share; the critical, they find out by chance.

Some components in themselves, as the structure of a school system, can impede direct communication, especially where two or more administrators may be perceived to share the same responsibility. In all three reviews, a need for a distinct line of authority in the administrative structure to facilitate clarity and consistency in communication among staff members, was determined an urgent need. For example, junior and senior curriculum supervisors, in dealing with particular programs, were seen as being responsible to the sub-system supervisor or principal and to the assistant superintendent of schools. As may be expected when answering to two bosses, there sometimes is confusion in what message to respond to. Mixed messages are the result.

6. Being adaptive to change: In all three reviews, mention was made of the need for computer technology to be used at all levels of management.

While evaluators assumed that most clerical duties in finance were being performed through the use of computers, it was surprising how many menial tasks were occupying the time of certain individuals, particularly supervisors.

9.3
DECISION-MAKING

Applications To/Examples In Three N.S. School System Reviews

As noted in the HCBDSB review, **school-based management** has become a fundamental unit of DM. Central office, board, and principals act as the facilitators. In one of the five sub-systems of the HCBDSB, the principals have been given more authority and responsibility for decision-making in budgets, curriculum, and personnel. Again, in the HCBDSB, site councils, a distinctive characteristic of **site-based** managed schools, have provided a vehicle whereby parents, teachers, and community members can assume more authority in decision-making.

While stated intentions for the implementation of **collaborative decision making** were pronounced during the review of the HCBDSB, school based administrators and their staff revealed that they had little input in decision making even though many of them were members of policy development committees wherein they practiced consultation, cooperation, consensus and collaboration. Although attempts were being made to **decentralize** operations, in reality it seemed to be that more, rather than fewer, decisions were being made at central office (HCBDSB Review Report, 1991). In other words, while current philosophies seem to advocate interlocking levels of decision-making, centralized or **top-down** decision-

making is still a formidable barrier to horizontal and upward processes.

In the HCBDSB review, constant emphasis was given to the need to continue growth in **collaborative** decision making, **teacher empowerment**, and the broadening of the approach to decision-making tasks to include the input of all stakeholders. In this way a team approach to educational leadership, communication, and decision-making would be established. The term "empowerment" was used by several principals in the HCBDSB. The impression given by the employees was that the Chief Executive Officer believed firmly in the concept but that senior staff did not universally and consistently act in accordance with it.

Quite often the key problem of decision making is a perceived or obvious ambiguity regarding who is responsible not only for implementing but also for interpreting particular decisions (Ouchi, 1981). Such a revelation was most startling and striking in the survey reports of the NVDSB (1985) and HCBDSB (1991). To overcome a wide variance of policy interpretations, the establishment of standard operating procedures (SOP's) throughout the system can be developed for budgeting, resource allocation, curriculum review, and communication mechanisms. The introduction of SOP's provides guidelines for reviewing problems and establishes clear, explicit parameters for consistent actions. A manual of standard operating procedures helps to eliminate inconsistencies in the interpretation and implementation of policies and, as a result, saves a great deal of time in the process (Simon 1976).

In each of the reviews of the three systems, the time consumed in decision-making and the inconsistencies among decision-makers in various sub-systems were astounding and deplorable. The time and energy spent in the decision of routine problems could have been avoided by a SOP manual.

The LINC *Interactive* MODEL
I: INTERACTION and the INDIVIDUAL

9.4
(B): THE WORK FORCE
[i.e. The INDIVIDUAL (the employee)]

Applications To/Examples In Three N.S. School System Reviews

In the HCBDSB Review, a great deal of emphasis was placed on the employee. The report, while acknowledging the contributions and the numerous indications of leadership by many teachers involved heavily in developing, implementing, and monitoring curriculum, peer teaching and peer coaching, stressed that more attention should be given to cultivating the abilities of all staff members and rewarding them.

In the NVDSB Review, emphasis was placed on the need for teachers to have opportunities to meet for professional development, to discuss mutual problems (especially programs), and, generally, to meet their professional needs through scheduled in-service education. In the DDSB Review, there is no area in either report (internal or external) that deals specifically with the workforce. The review looks at schools, property, maintenance, administration, curriculum, students, and continuing education. Even with such components, the internal review is very professionally oriented. While the NVDSB review criticized three senior supervisors, the DDSB review was quite patronizing to its professional staff. In the review of its continuing education program (the only component that makes any direct reference to teachers), mention is made to the fact that "the teaching staff is excellent -- they teach because they are interested in passing

on knowledge of a skill which they themselves enjoy."

In the HCBDSB review, evaluators were made aware of the new models currently being implemented to assess the performance of teachers, administrators, and students. The absence of evaluation techniques relative to performance, accountability, and goal achievement of senior management and sub-system supervisors was noted. Many individuals reported that they had "never been evaluated since [they] came here" (p.18). The school system can only be assured of success in its product and its leadership by an established and credible assessment process that includes articulation, communication, monitoring, and continuity (Garmston, 1987). One such model is the Human Resources Supervision Model of Sergiovanni and Starrett (1989) that equates effective supervision and evaluation to effective and satisfied teachers.

While theory and research can point the way to a motivated workforce and hence effective school systems, the reality of the workplace -- more especially in the Nova Scotia school system and more particularly, the instructional unit -- often negates implementation of such positive actions. The Nova Scotia Teachers Union is a powerful force in the operation of the provincial school systems and, as a result, often dictates the quality of the workforce and workplace -- especially in times of tight money policies, cutbacks, and school closures. The union contract (in Nova Scotia called the "agreement") often equates to the norm for teacher professionalism and instruction. Curriculum becomes a low priority, divorced by predominant interests in economic welfare (Murphy, 1987).

9.5
INTERACTION

Applications To/Examples In Three N.S. School System Reviews

(a) Interaction of the environment (internal & external): Environment impinges on and shapes the structure and administrative processes of the organization and vice versa. A newly created position in the HCBDSB; namely, the Director of Race Relations, Cross Cultural Understanding, and Human Rights, readily substantiates such an assertion. Moreover, the general uncertainty, scarcity, and coping strategies that emerge every year in all N.S. school systems are brought about by the behaviours of the external environment, especially financial resources, or, more realistically, its lack of them. One has only to witness the general economic climate, financial roll backs, staff cuts, declining enrollments, school closures, etc. that lead annually to conflicts among dominant coalitions, especially unions, institutions, and governments. During the '90's, every school system has experienced scarcity of resources, uncertainty of programs and staff retentions, and the continual coping to maintain the status quo.

(b) Interrelationships of stakeholders: The HCBDSB review forecasted a shift from official to unofficial leadership that has resulted in various tasks, once performed by the HCBDSB administrators, being replaced in one of its sub-systems by the process of on-site management by teachers and community groups. In the DDSB review, in which there were no parent surveys or public meetings, the lack of briefs from special interest groups may have served to mute constructive criticism from individuals and groups which, decidedly, have the most at stake in public education. The main shortcoming

in the internal review of the DDSB review stems from its inability to incorporate sufficient interaction from the public.

(c) Interaction of workforce: In the HCBDSB review, there were numerous examples of interaction with the individual(s) and with leadership, decision-making, structure, etc. -- either through negotiations, professional development, administration, or the Employee Assistance Program.

(d) Interaction of leadership: In the HCBDSB, the greatest example of interaction was with the dimensions of leadership relative to goals, decision making, and communication processes undertaken to implement policy and change. A particular comment re-echoed by principals of the Halifax County-Bedford District School Board regarding their senior administration was that the effective influence of a leader springs from healthy interrelationships of mutual trust and respect.

(e) Interaction of curriculum: All three reviews indicated evidence of curriculum as an interactive component with the internal and external environment -- externally with the offices of the Department of Education and parents (where it was looked upon as a mechanism to gauge effectiveness) and internally with teachers, students, and administrators. In the NVDSB, an example of a dichotomous interaction lies in the fact that in health classes, teachers were underscoring the importance of nutrition, yet in the work place (as in the cafeterias) junk food was being served

(g) Interaction of communication: In the DDSB review (1987), while 90.5% of all respondents believed "that it was important for school and community to share information on school issues", almost half of the respondents who were surveyed revealed that they were not satisfied with the way school personnel explained the School Board's educational policies

(p.3).

In the HCBDSB review, principals and staff were asked to respond to a seven page questionaire in which the evaluators asked the question: "What is your perception of the effectiveness and openness of communication between the various partners in the education process (District board, central office, supervisory staff, school to school, principal, Department of Education, Board of Trustees, students, parents, staff, etcetera.)?" .

In the NVDSB, evaluators noted in the curriculum at the secondary level, that there was a need for the interaction of leadership and communication -- especially in long range planning of in-services and in providing opportunities for interested teachers to interact in matters pertaining to curriculum and teaching techniques.

The LINC *Interactive* MODEL
N: the **NEXUS** of all organizations
GOALS, ENVIRONMENT, STRUCTURE, and PROCESS

9.5
GOALS

Applications To/Examples In Three N. S. School System Reviews

In the HCBDSB Review Report (1991), an analysis of the goals of the system indicated that the Board, through its administration, had developed thirteen objectives (the word was used synonymously with "goals"). Answers to questionnaires submitted by all the school principals and school teachers of the system, however, indicated that goals, as set by the schools, varied in number. Some schools had one or more goals; others had none. Upon further investigation, all those interviewed (administrators, principals and teachers) reported that school goals and objectives established for the school year 1990-91 were generally aligned with stated system-wide goals, and had been formulated collaboratively. Such then was the intent! As assessed by this evaluator, however, the thirteen district goals actually mirrored only two of the eleven school goals; namely, to develop race relations/cross cultural understanding/human rights, and to develop long term planning for implementation of integration and mainstreaming. Ironically, all those interviewed reported they had established goals and objectives for the current school year. For those at the sub-system level and below, the goals and objectives, they believed, were generally aligned with stated system-wide goals, and were generally established collaboratively. There was little evidence, however, that any long range goals had been established or that goals, while official, were operative.

Many of the N.S. school systems, including the NVDSB, the DDSB, and the HCBDSB, have adopted a procedure for goal development and implementation, especially regarding the recommendations from their respective review report. This set of procedures resembles the I. D.E.A framework (page 194) as advocated in the LINC interactive Model and is defined as a five-fold systematic framework or process (Table 9.5).

Table 9.5: <u>Five-Fold Procedural Framework to Implement Goals:</u>

STATEMENT>	INITIAL STATUS>	ACTION>	CURRENTSTATUS>	ACCOUNTABILITY
1	2	3	4	5
^	^	^	^	^
(objective)	(development)	(implementation)	(update)	(staff responsibility)

The first step in the process is a **statement of the objective**; for example, "to develop and implement a system-wide policy on race relations, cross-cultural understanding, and human rights". The second is a **status** step containing background statements regarding the formulation and development of the objective. The **action plan** (third step) outlines the process to be followed for such processes as input, strategy development, reporting to the board, implementation and evaluation. The fourth, the **current status**, summarizes where the project is at the present time. The last step in the process, **accountability**, is the written report prepared by staff. It provides the names of the staff personnel responsible for overseeing the specific objective project and the time limits for achieving and reporting on the particular goal/objectives/'targets'. Implicit in such a procedure is the assertion that these processes make use of community resources and stakeholders in partnership with the board (Stake, 1967; Weiss, 1980).

Regarding the pertinent characteristics of goals, the HCBDSB school review (1991) stated that:

> Goal setting be collaborative in order to align the specific objectives of the district with those of the sub-systems and schools, and vice versa. Goals be fewer in number,prioritized, monitored annually, and articulated meaningfully, explicitly, and clearly to the stakeholders (p.10)

Analyzing unexpected outcomes often produces more relevant information than that garnered from what are expected goals. In the Northside-Victoria District School Board's System Review of 1985, an excellent example of unanticipated results was revealed in the evaluation of library services. What had been considered a major problem in the unexplained and unsolved vandalism of research materials in the library of the system's largest school, was explained in the lack of scheduled time for student research projects.

In the previous reference to job descriptions of supervisors in the HCBDSB, a very clear example of the difference between the intended and the unintended may be readily discerned from a study of what supervisory personnel are supposedly "legislated" to do (especially as delineated in their job descriptions) and what they actually do.

9.7
ENVIRONMENT

Applications To/Examples In Three N.S. School System Reviews

(a) Environmental Conditions: In the HCBDSB, current trends in education favor decentralization of control through such methods as on-site management, participatory decision-making, and community schools -- where

the parents, students, and teachers, to varying degrees, are involved in decisions affecting the delivery of education in their local communities through school councils, monitoring committees, community agencies, and inter-agency councils in making decisions affecting the schools in that sub-system. Within the district and its various communities, feelings of trust and confidence have developed through parental involvement, student-teacher interchange, and student-centered learning.

(b) Environmental Concerns: In all three reviews, many of the complaints from the community were of a practical nature, from such major problems as inadequate financial resources, open board meetings, establishing committees, and open communication to those concerning a janitorial conflicts or inadequate lighting in parking lots

In the NVDSB review, concern was expressed by the educators and community alike on how to provide and maintain quality education for the students of Northside-Victoria. The survey team attempted to answer this concern by accepting briefs from groups and individuals. Nineteen briefs were presented before members of the review team and centered on views that parents had on a wide variety of subjects; for example, individual schools ("it is everything a small country school should be"), transportation ("unable to participate in extra-curricular activities because of distance"), text books (their scarcity), teacher appointments ("training and ability of teachers reassigned through transfers"), curriculum (nothing for the "gifted" students ... more computers needed"), administration ("principals should be providing active leadership in curriculum"), the board (senior administrative staff too influential) , food services (not following the Canada Food Guide), and the school review process (quite lengthy in presentations because at that time the

board had just completed closing 10 schools in 3 years and was contemplating closure in three other locations).

(c) Environmental Boundaries: The HCBDSB review indicated that efforts undertaken to develop structures that link the environment with the school and to nurture a partnership among co-ordinators and supervisors reflected a commitment by the system to address the various needs of its stakeholders. The very fact that the school system, through such supervisors, is reacting to the needs and problems of its society (for example, day care, drop-outs, literacy, and race relations), is indicative of its attempt to foster a positive and growing partnership with its environment.

(d) Environmental Scanning: In acquiring data for the school-community segment of the DDSB review, the committee designed a phone survey and randomly sampled 2% of all Dartmouth households. The survey was based on a three part questionnaire sought to determine community views on the education in the DDSB. It was completed by 600 of a total of 2,429 phone calls. The decision not to have conducted a parent survey, the absence of public meetings, and the lack of briefs from special interest groups may have served to mute constructive criticism from individuals and groups which, decidedly, have the most at stake in public education. While the Internal Review report of the DDSB may be lauded for its "self-assessment", one wonders at the merits of such an evaluation approach when it was developed and implemented by professional staff only.

(e) Stakeholder's Approach: In the organizational stages of the DDSB, attempts were made to have a suitable volunteer come forward from the community to take committee leadership. Although principals were requested to submit names of active home and school members and other interested

citizens and parents, in the end, the review attracted only six citizens-at-large. One of the seven committees active in the evaluation was the School and Community committee which was mandated to survey the stakeholder's views of the Dartmouth schools by evaluating (1) the public's present and future perceptions of the DDSB and (2) the public views on education in general.

Attempts undertaken in the HCBDSB to receive feedback from the environment, to improve school-community relations, and to involve stakeholders such as trustees and senior citizens exemplify the necessary change processes that must take place in school systems. Laudable efforts were taken by educators in every area of the HCBDSB to work with stakeholders in the community and to seek and encourage outside support. For example, sub-system curriculum supervisors and student services supervisors held meetings with parents and trustees or organized evening curriculum workshops for parents.

9.8
STRUCTURE

Applications To/Examples In Three N. S. School System Reviews

The query of discrepancy in what administrators say they do or what is written in their job descriptions and what actually they do, set the stage for the evaluation of the educational administrators in the Halifax County-Bedford District School Board Review Study of 1991. In an initial meeting between Department of Education officials and school board members and administrators, four facets of the school systems structure/role component were identified and mutually agreed upon as major areas to be assessed by external evaluators. Specifically, the concerns were the roles of administrative

leadership in (1) personnel, (2) professional development, (3) curriculum, and (4) operations. Inculcated in this mandate was a directive to find any discrepancies between what the existing roles actually were and what they should be. In the HCBDSB review, role discrepancies abounded in all of the above four areas.

The HCBDSB Review Report (1991) illustrates very well the value and utility of Provus' Discrepancy Model. The evaluators, in reviewing the roles of senior educational administrators, considered some basic standards of performance (for example, written job descriptions). During the course of these evaluations, they determined, through interviews and observations, whether or not any discrepancy existed between the described standards (job descriptions) and the actual performance of such written duties and obligations by these administrators. Using this information, the evaluators were able to compare performance against established criteria; e.g., written and established policies (particularly in job descriptions) and responsibilities of supervisors relative to the size of each sub-system. [The smallest sub-system in the HCBDSB (Musquodoboit-Sheet Harbour: 3,698 students, 246.5 teachers) and the largest sub-system (Eastern Suburban: 8,671 students, 501.2 teachers) each had the same number of supervisory staff, despite the variance in size].

Aside from examining the roles and job descriptions of its supervisory staff, a school system needs to examine its administrative structure. In doing this, the evaluators of the HCBDSB's educational administrative staff premised their review of administrative structure on the belief that a school system must consider the curriculum and the instruction branch of its operations to be the paramount focus, with all other branches

providing support for the delivery of curricula/programs to the students. The Superintendent of Curriculum and Instruction is "front and center"-- based on the belief of the evaluators that these two-fold responsibilities are the reasons why school systems exist. All in all, such a schema, therefore, flattens the organizational patterns, allows for more responsibility at the sub-system level, places supervisors back in 'field' positions and underscores the major purpose for a school system's existence: curriculum and instruction -- learning and teaching!

In proposing a reorganization of the administrative structure of a school system, sensitivity to the feelings and aspirations of current and future staff will be required. To address this issue and to assist in the implementation of restructuring, consideration should be given to a succession plan. Such a plan would allow for the development of role descriptors and for the placement of staff in their new roles over a planned period of time and as resources permit. For example, as staff retire, are promoted, are reassigned, or resign, the positions in a new organization could be filled. A succession plan allows for an orderly transition from the old to the new.

In addition to succession planning, school systems should design and implement a career ladder program to facilitate a strong structure for future needs. Highly qualified, trained and motivated personnel within each designated role of the structure should be maintained and/or recruited. Clear guidelines should be made available throughout the school system to ensure that every employee is aware of what criteria are necessary for the promotional process. Each employee has a stake in the success of the system, as does the system in the success of each employee. A school system, therefore, should: (a) facilitate professional development for system

growth and personal career advancement, and (b) offer, in conjunction with appropriate institutions, designated professional courses. A school system that plans for future succession in its organizational structure is a school system ready to face future decades successfully, with management expertise and dynamic participation always available.

9.9
PROCESS

Applications To/Examples In Three N. S. School System Reviews

Newton and MacKinnon's (1990) eight study approach (page 259) parallels very closely the pattern followed during on-site visitations by evaluators of the HCBDSB. In assessing (1) planning systems and (2) budgeting, the evaluator analyzed board documents (policies/by-laws), interviewed (board members, central office and field staff), and observed (meetings, workshops, etc.). Regarding Newton and MacKinnon's (3) policy making and (4) decision-making dimensions, survey instruments were usually delivered to principals and teachers to ascertain whether or not policy and decision making was, for example, hierarchical or collaborative. In the Dartmouth District School Board Review (1988) and the HCBDSB Review Report (1991), similar procedures were followed. Implementing and monitoring programs (6) involved interviews and/or questionnaires administered to teachers, administrators, students, and the members of the school board.

Visiting classes, distributing questionnaires, interviewing students and analyzing test units are commonly used techniques of evaluation processes. The processes for evaluating the eight dimensions [as advocated

by Newton and McKinnon, 1990 (see p. 259)] are: (1) to structure interviews and discussions with all stakeholders (including students) and (2) to have specific stakeholders (e.g., teachers) complete questionnaires pertaining to specific issues (e.g., developing and implementing curriculum). Both processes were followed in the NVDSB (1985), the DDSB (1987) and the HCBDSB (1991) reviews.

The process of evaluating school systems has now become more an exercise in analyzing provincial standards and comparing them to a national standard. Today evaluators talk about benchmarks (current levels), targets (levels of improvement within a specific period of time), and standards (levels of desired optimum). Schooling is being tested in the cognitive, affective and behavioral domains, through such tests as the Nova Scotia Achievement Tests (NSAT), The Canadian Test of Basic Skills, The Canadian Achievement Tests, the Canadian Cognitive Abilities Test, the Children's Self Concept Scale, etc. In the external assessment of the HCBDSB, one of the five sections comprising the report dealt exclusively with the Grade 9 and Grade 12 NSAT results.

Interestingly, the process of evaluation in the DDSB and the HCBDSB were "cooperative" reviews; that is, there was an internal and an external review team. The DDSB external review was to serve as a validation of many of the internal review's findings and recommendations that were completed before the external review ever began. The completed review (consisting of the internal and the external findings) was originally intended to highlight similarities or dissimilarities on how the system was viewed by an in-house review as opposed to an objective evaluation by an external team. What appeared in the final document, however, was negotiated and resulted

in a "meshing" of the internal report into the external report for reasons that can only be attributed to political influences.

The mix of an internal review generating local insight and an external review capable of raising an objective evaluation may more effectively lead to the development of an overall model of school system evaluation that follows the spirit of the Graham Commission's recommendations. In the HCBDSB evaluation, there was no mixing of the two reports. A separate internal and external review was performed on different aspects of the school system. The Provincial External Review, chaired by the Department of Education, considered the process of five facets of the school system: the Board, Administration, Property Services and Transportation, Use of Standardized Provincial Test Results, and Finances, while the process of the District Internal Evaluation dealt with (1) programs (through a services survey and committee meetings and (2) an overview of the system (i.e., the collecting of basic data regarding the curriculum standards, professional development of staff, student services, and change and innovation beginnings.

The LINC *Interactive* MODEL
C:
CLIMATE (WORKPLACE), CULTURE, CHANGE, CURRICULUM

9.10
CLIMATE (THE WORKPLACE)

Applications to/Examples in Three N. S. School System Reviews

None of the above methodologies, as stated in Chapter 8.10 for measuring climate, are alluded to in any of the system reviews conducted in the school districts of Nova Scotia. For many reasons, least of which are political ones, evaluators did not report on the organizational climate or health of the workplace. It is the location of the workplace that is assessed and referred to in the "Property Services and Maintenance" sections of these Nova Scotia School System Surveys. Most often these sections are checklists of facilities or descriptions of schools and classrooms and translate into a litany of specific physical plant heating, painting, and lighting disorders. The typical pattern has been to detail the number of rooms and buildings of each school, enumerate their types and grade levels, and specify weaknesses or maintenance needs in each school; for example,

> "some emergency exit lights and classroom fixtures are not operating",
> "interconnecting doors are obstructed",
> "heating system is inadequate, poor ventilation...",
> "broken windows, door lights, ceiling tiles, frayed carpets",
> "ramps inadequate".

Likewise in the DDSB review. Although the internal review committees applauded the overall climate of the system, concern regarding the inappropriate and inadequate workspace assigned to various services is expressed in the Report of the Committee on Special Services. Witness, for

example their bluntness in addressing the dismal conditions the student services personnel faced:

> - "The implication is that within education, student services are seen not as an integral part of the system but as "frills". It would appear that no appreciation is given to the confidential nature of the work. The physical separation of secretaries and supervisors necessitates considerable travel each week. More important, communication and coordination of services suffers" (p.3)
>
> -" the types of room which are used when services are provided to students range from the library and resource room to book storage rooms and outer washrooms; (p.3).
>
> -"Ventilation is a problem with 27% of these rooms while the noise factor is problematic in 30% of all available rooms"; (p.4).
>
> -"This room , in many cases, is shared by as many as 16 other people who offer service to the schools on an itinerant basis" (p.4).

Occupational health and safety have become important by-words in the workplace over the past decade. Many systems have appointed system-wide committees and local school committees to supervise and promote health and safety in the workplace. The HCBDSB, relative to provincial undertakings in these fields and the deemed importance of such undertakings, appointed three years ago a Health and Safety Officer. Her mandate has been to implement and direct improvement in the safety and health of the workplace from initiating regulations regarding safety devices and protection in the teaching of Industrial Arts or Physical Education to the correction of faulty ventilation systems in school buildings -- the latter being one of the major problems facing many N.S. school systems at the present time.

In sum, all of the Nova Scotia school system evaluations of the workplace examine, with regularity and precision, property and maintenance

These reports always comprise admonitions to school boards to reallocate facilities or consolidate them, improve storage areas, curtail vandalism, procure janitorial supplies, etc. And the evaluators, year after year, have consistently re-echoed three necessary changes in the workplace: (1) the need for manuals containing regulations and procedures regarding accounting procedures and/or communication [in 96% of all surveys], (2) the development of a supervision policy for all employees [82%], and (3) the need for in-servicing of all staff [86%].

9.11
CULTURE

Applications to/Examples in Three N.S. School System Reviews

One of the most revealing examples of **sub-cultures** was to be found in the revelation of the Principals' Association in the DDSB. This organization, formed over 30 years ago, owes its existence and power to a previous administration. While not certified by the board or central office administration, it has its own meeting times and established practices. Although this recognition has never been formalized and although the group does not operate under the auspices of the board, the association serves its own people very well, by lobbying the school board in deference to the present central office administrators. Conflict of opinions between the Central administration staff and the principals ensue over such issues as the status of specialist teachers and the policies of hiring and transferring staff. Except to suggest that the principals' association would best serve the school system in a consultation and professional role, the DDSB report does not reveal the real power of such an association in the daily life of the school system (Muir, 1988).

In an interview held in 1988 when he was the Director of Inspectional Services, Dr. Jamie Muir termed the Principals' Association an "ad hoc political club". Through the insistence of the Internal Report co-ordinator, Ms. Alice Hale, a principal in the system, such a remark was deleted from the report. Dr. Muir also asserted that the principals' group was "an old boys' club that didn't know when to keep their hands out of things". Such comments also, because of political implications, were taken out of the report, or, as evidenced in pages 3.1 - 3.10 of the"joint" (?) report, toned down considerably. (In a similar vein, total sections of the Halifax (City) District School Board (1985) report, because of conflicts and disagreement between the internal and external evaluators, were completely re-written by the administrators of the school system, and then shelved for eternity.)

Department officials often impose their own **institutional culture** to influence the evaluation, as exemplified in all final reports. Moreover, teachers, principals, and board administration often shape the evaluation to gain definitive ends. In short, the politics of evaluation becomes a contest of the power and wills to gain evaluators attention, to explain away negative findings, to acquire credit and honor, or to place blame for failure on certain individuals or procedures. The dominant culture enters the evaluation process at every stage, especially pertaining to decisions regarding the objects, methods, and processes of evaluation.

Examples of **symbolic culture** now abound in school systems. For example, the NVDSB at one time featured a map of Cape Breton Island with two of the four counties (Victoria and the northern part of Cape Breton County) darkened. The logo has been changed in recent years to feature two students sitting at the top of the letters N and V that are formed in the shape of

a desk. Ironically, the motto of the NVDSB is "Dedicated to life-long learning", the same motto as that of the HCBDSB. Such logos depict the essence of mission statements and appear in all advertisements, memos, letterhead, publications, etc. of the board.

As mentioned, the culture of school systems can present obstacles to the preparation, presentation, and control of evaluations. Those entrusted with evaluation must concern themselves with the reality of political and cultural intervention and be prepared to cope with it on a supposedly disinterested plane.

9.12
CHANGE

Applications to/Examples in three N.S. School System Reviews

In the HCBDSB Review (1991), there was reference to a number of common restraints or barriers that have been identified as being resistive to change and to school system improvement. These caveats parallel Gross' (1979) identification of seven important impediments to educational change, among which are the failure of district school system administrators to recognize the importance of the implementation stage of the process, the absences of leadership, the non-acceptance of innovation, participation and feedback. In the HCBDSB review there was an unwillingness by several supervisors to garner openness and trust and to encourage a workforce to build consensus, flexibility, and staff development. The principals stressed their commitment to change but were dismayed by the lack of leadership, trust, and commitment from their supervisors. As a result, a set of critical benchmarks was put forth to denote how crucial it was that someone be responsible for developing,

implementing and monitoring change.

The HCBDSB review pointed out the need for school districts to adopt a master plan to help facilitate and provide changes when and where they might be deemed necessary. The encouragement of a master plan allows for direction and enables personnel to see the system working as a unit. A combination at all levels -- the board, central office administrators, and teachers would enhance communication, cooperation,support, loyalty, and initiatives. The staff must feel a part of the whole organization and be empowered to interact in the change processes.

As a prime example of effective strategic planning, the NVDSB review (1985) gave recognition to a seven year plan that had been developed by the Supervisor of Elementary Curriculum to train teachers in a Whole Language Program before this curriculum change was introduced into the school system.

9.13
CURRICULUM

Applications of/Examples In Three N.S. School System Reviews

In Nova Scotia school systems, the curriculum becomes synonymous with the "PSP" (a publication entitled the Public School Program) which lists all the courses from P-12 in French and English, as prescribed by the Department of Education. While the previous twelve components of the **LINC *interactive* Model** occupy a significant ranking in the theoretical literature of school systems, curriculum or program occupies, not only the major thrust of the five theorists and their models, but also the major thrust in each of the twenty-five evaluation surveys or reviews of the Nova Scotia School Districts. The only

exception is in the most recent school system review (HCBDSB), where the evaluation of curriculum was not performed. While a great deal of time had been spent over the past twenty years in the HCBDSB on curriculum development, and more recently on implementation, not enough attention has been given to evaluation of district curriculum initiatives. Teachers assumed such programs would be evaluated, yet no long range plans were operative or ongoing.

Other school reviews conducted in Nova Scotia from 1979 to 1990 contain a large segment on curriculum evaluation -- usually in every discipline (English, Science, Math, etc.) and at every level of the school program. Such assessments have been performed by members of an external team composed of personnel from the Curriculum Division of the Department of Education or, in exceptional cases, as in the Dartmouth Cooperative External /Internal Review of 1988, by the Program Curriculum Committee comprised of teachers from its own system.

Not surprisingly, the evaluation incorporated more concerns of a professional nature than of the prescribed curriculum. In other words, rather than offering a critique of programs, the DDSB evaluation became a litany of concerns of 70 Dartmouth teachers at various levels, regarding student integration of pupils, long-term planning of inservices, more effective use of curriculum supervisor's time, and French Immersion "problems". Very little attention was given to program development and delivery. One might have expected some comment, for example, on the implementation of the Whole Language program, Maritime Studies, or Health Education -- issues which might have been raised by parents and special interest groups, had they had the opportunity to contribute to the review.

The DDSB Review resembles the CEDSS (Cooperative Evaluation and Development of School Systems) approach -- a flexible, rational and clearly defined model. The model includes two major activities (evaluation and development) and eight stages -- all of which have already been explained and diagrammed in the summary of the processes used in Nova Scotia school system reviews (Chapter 7).

In each of the school system evaluations conducted in Nova Scotia from 1979-1990, the curriculum component constitutes the "bulk" of these evaluations. For example, in the NVDSB survey (1985), 51 of the 178 pages and 86 of the 159 recommendations related to programs and curriculum. Table 9.6, on the following page, delineates the "weight" given to each of the components evaluated in the NVDSB school system survey.

Table 9.6: Component Weights: Northside-Victoria District School Board Review, 1985

Chapter	Component	# of Pages [%]	# of Recommendations [%]
1 Introduction		3 [.02]	0 [.00]
2 Administration & Organization		13 [.07]	7 [.04]
3 Finance		13 [.07]	19 [.12]
4 Programs & Curriculum *		51 [.29]	86 [.54]
	(a)Special services and programs including student services, guidance, organizations	18 [.09]	23 [.14]
	(b) School Library/Learning Resource	4 [.02]	5 [.03]
5 Transportation		33 [.19]	11[.07]
6 Board and Senior Staff	Briefs regarding utilization of facilities, staffing, French Education, etc.	27 [.15]	0 [.00]
7 Appendices (N.S. Achievement Tests)		10 [.06]	0 [.00]
TOTAL		178	159

CHAPTER X
IN RETROSPECT

Introduction

The purpose of this concluding chapter is to summarize significant aspects of the study and to present findings, recommendations, and conclusions that not only offer suggestions that hopefully will aid future school system evaluations and evaluators but also imply the need for further research

In reporting the findings of this study, the basic overall purpose and each sub-purpose, as stated at the beginning, will be re-examined in order to register the conclusions relative to each of the purposes and their subsequent methodology.

From the formation of the **LINC *interactive* Model**, questions arise as to how one can use the model and whether or not the approach is suitable for evaluating school systems. These questions are explored in this final chapter together with lessons learned from the conceptualization of the **LINC *interactive* Model** and the evaluation of school systems. The chapter and thesis substantiates the need for accountability and for further and current research towards the evaluation of school systems.

Report of Findings

In Chapter II, the basic purpose of the study and six sub-purposes were given together with the stated methodology to accomplish theses purposes. How were these purposes answered and what conclusions were drawn with regard to them? The sub-purposes of the study and the conclusion are:

Sub-Purpose # 1: To examine what is meant by

evaluation. This purpose was addressed in Chapters III and IV. Four major definitions and purposes of evaluation were delineated from a review of educational evaluation literature (Chapter III). These four definitions were then paralleled with four classifications of educational models (Chapter IV); namely, those objective/goal based (DEM) - i.e., *determining to what extent educational objectives have been met*, those that are information based (CIPP) - i.e. *providing information for decision-making by choosing alternatives*, those judgemental based (GFE) - i.e., *a determination of merit and worth*, and those designed to evaluated and promote educational change and improvement (Connoisseurship & Criticism) - i.e., *a systematic examination conducted to assist in improving the program.*

Conclusion: Since the focus in this study is school system evaluation, components as goals, decision-making, and accountability become significant evaluatory concerns. This study, aside from recognizing the importance of each of these three components and others, stresses the purpose of evaluation as promoting improvement and change to enhance a school system's growth in efficiency, effectiveness, and excellence. The definition -- *evaluation for recommended improvements* -- becomes a blueprint for evaluation pertinent to this study. Evaluation, as Stufflebeam (1971) stated, is not to prove but to *improve*.

Sub-Purpose #2: To analyze evaluation models of leading evaluation theorists in order to ascertain whether their approaches are suitable for the evaluation of school systems. This purpose was addressed in Chapter IV where an analysis was done of the models of five leading theorists --- delineating specifically their classification, description, purpose, application, strengths, and weaknesses.

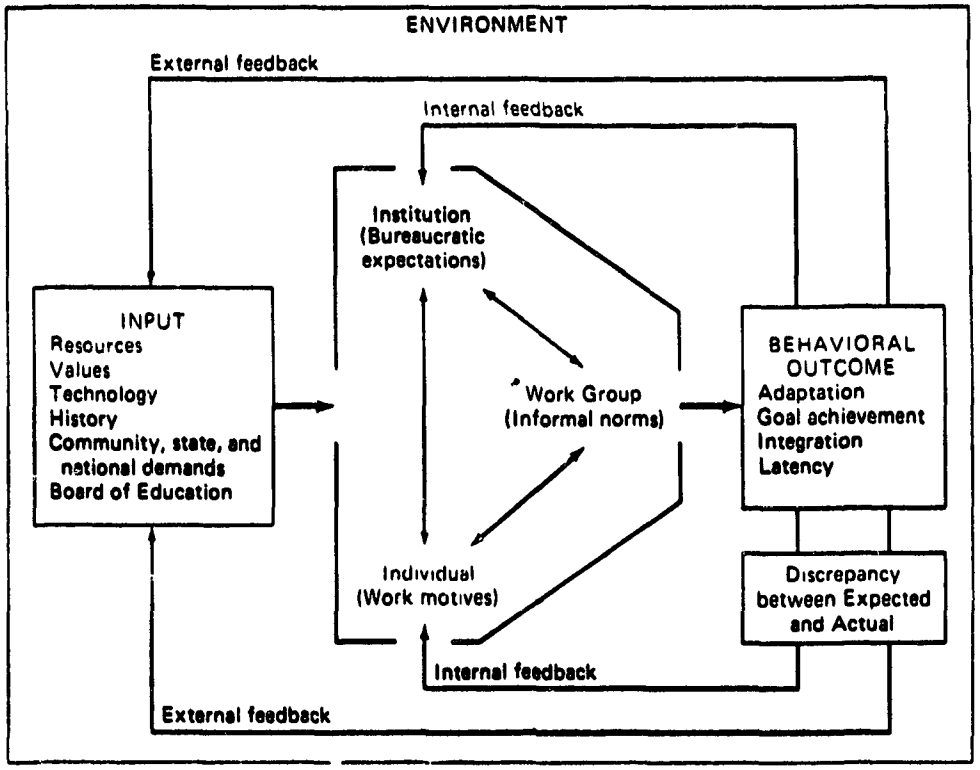
Conclusion: The educational literature reviewed for this study was often fraught with various "theories" of evaluation. There were models with four stages, with five steps, with complex matrices to be filled out, and with esoteric sounding designations -- all describing how evaluation should be performed. Many of these approaches borrowed from models more aligned with economics, law, finance, business, etc. than with the evaluation of school systems. Among the reasons given for this condition is that there has been a limited and somewhat inadequate body of theory from which educational evaluators can draw to develop school system reviews. As a result, school system evaluation is still not functioning effectively or efficiently.

As Grotevceachen and Gooler (1979) concluded and as revealed in this study, evaluation has different meanings to different people. For example, the classical goal model, one of the major designs of educational evaluation [as espoused by Tyler (1942), enhanced by Campbell and Stanley (1963) and refined by Provus (1970) in his Discrepancy Model], follows a linear-design approach that emphasizes the measurement of goals in behavioral-objective terms. In contrast, Scriven's (1967) reaction that goals should be evaluated by either a formative or summative approach, led to a second model (a "New Wave") later enhanced by Stenhouse (1979) and Eisner (1976) that advocated a more holistic methodology (characterized by the "descriptive-explanatory-judgemental" approach to evaluation). These approaches do not use a standard methodological pattern but a collage of various evaluation methodologies: for example, evaluating processes and outcomes (Scriven), gathering information, interpreting and judging (Stufflebeam), seeking discrepancies (Provus), and monitoring with consistent feedback or responsiveness (Stake).

The argument throughout this study has been that such theoretical evaluation approaches to school system evaluations have been too narrow to serve as an adequate basis for judging a school system. As constantly reiterated, most evaluations have been product/project/program oriented and concerned either with compensatory programs or consumer goods. I have also argued that these evaluation models ignore many of the pertinent aspects and components of school systems that are important to a holistic assessment of school districts.

One prime example of the change in the goal theory evaluation of school systems and the concomitant usage of some of the major principles of the theorists reviewed in this study, can be seen in the alterations (figure 10.1) made recently in a theorist's concept and definition of a school system.

Figure 10.1: A Social Systems Model for Schools



(Source: Educational Administration: Theory, Research, and Practice. (1991, p. 42)
(Hoy, W.K & Miskel, C.G.)

The goal component is woven into bureaucratic expectations, informal norms of the workforce, and individual work motives. The most significant change is in the inclusion of the evaluation strategy of judging a **"discrepancy between expected and actual"**, which, of course, is a major evaluative principle of Provus and Scriven. The figure (10.1) indicates those significant modifications in the social systems model by Hoy and Miskel (1991) as compared with their 1987 model (see Figure 5.2, pg. 119). Their "new" social system model for schools recognizes the importance of such **LINC *interactive* Model** components as **environment**, **communication**, **culture**, **interaction**, **climate**, **change**, and **process**. As constantly explicated in this study, there has been a growing emphasis on three variables in school system evaluation; namely the individual, the environment, and the organization.

Sub-Purpose # 3: To delineate the components and characteristics that comprise school systems. This sub-purpose resulted in defining school systems, in extrapolating research-based components of a school system, and in comparing how each of them relate both in theoretical and practical and in social and public school system contexts. (Chapters IV, V, and VI).

In this study, a school system was defined eclectically from the various definitions given in Chapter IV; namely, as an **open system, comprising distinctive interactive social units or components that, while nourished by and dependent upon their environment, form an organized whole and a network to serve a common purpose** (Walker, 1961; Burnham,1970; Krapel & Gasparotto, 1982; Hathway, 1986; Herman, 1989).

The search of the literature [educational evaluation (Chapters III, IV) , school systems (Chapter V), organizational effectiveness, and effective schools (Chapter VI)], resulted in a compendium of thirteen salient components that comprised a new and unified interactive framework --- the **LINC *interactive* Model** for the evaluation of school systems (Chapter VII). Its domain of thirteen components serve as a set of universal indicators that can provide an adequate description of the complexity of the system and serve as a means to judge and to improve its performance.

The emergence of these thirteen components came from a tabulation of their frequency, prevalence, and prominence in the literature of the 1970's and 1980's. From the literature review of 1970's came **goals, structure, environment, communication, and interaction**. The remaining eight components have been more predominant in the 1980's and the 1990's. They are: **Leadership** (the #1 component of effective schools and school systems), **process** (vs. product education), the **workforce** (i.e., the individual -- the key to organizational success), **decision-making** (processes of collaboration, collegiality, and empowerment), the **workplace** (a safe environment and a climate conducive to learning), **culture** (shared assumptions, norms and values), **curriculum** (relevant programs to the future needs of students), and **change** (strategically planned through professional development). Of the above "emerging" components none are more important than the four C's: **culture, climate, change, and curriculum** -- each of which is significantly interrelated with and dependent upon the **leadership** of an individual or group. (In Chapter VIII, the definition, significance, classifications, and pertinent characteristics of each of the thirteen components of the **LINC *interactive* Model** were explicated).

Conclusion: The purpose of an evaluation of each of the thirteen components, taken interactively, is to enhance and strengthen a school system in the hope that from a review of each component, performance can be improved and pro-actively changed. By making a positive change in any of the components, efficiency and effectiveness for a school system is provided; for example, a positive change in Leadership (being more collaborative and collegial) effects many of the other components as decision-making, process, change, culture, interaction, etc.

The thirteen major researched components of the **LINC** ***interactive*** **Model** serve as evaluation tools to accomplish the following:

(1) to describe the condition of the school (assessing its strengths and weaknesses),

(2) to give a picture of a school system's quality and performance by judging its efficiency, effectiveness, economies, and excellence,

(3) to provide information concerning current and future trends that can be useful for decision-making and change,

(4) to promote improvement through recommendations, and

(5) to instill well designed feedback mechanisms by using a variety of methods (such as surveys, interviews, inquiries, questionnaires, etc.)

Newton and MacKinnon (1990) maintain that a school system evaluation must have as one of its major outcomes, system renewal [(i.e., the growth, improvement, and development of the organization (as referred to above)]; otherwise, the evaluation would be of little consequence to the evaluator or the evaluatee.

Sub-Purpose # 4: To devise an approach/model that will adequately address school systems evaluation. The methodology (Chapters VII and VIII) used in constructing a new approach for school system evaluation, the **LINC *interactive* Model**, was based upon:

(a) a review of the literature of existing **educational evaluation models, theories and literature**. [e.g. the models of the five leading theorists: CIPP (Stufflebeam), DEM (Provus), Countenance/ Responsive(Stake), GFE (Scriven), and the Critic/ Connoisseurship (Eisner)]. These models were classified as (1) alternative - decision based models and (2) judgemental (client/professional) based approaches.

(b) a review of **school system theories**, primarily the open school system concepts of Getzels and Guba (1960) [more recently substantiated, developed, and enhanced by Hoy and Miskel (1987, 1991)],

(c) the results of the **organizational effectiveness studies** of Katz and Khan (1966), Mott (1972), Steers (1977), Pennings and Goodman (1977), Campbell (1977), Beer (1980), Cummings (1980), Ratsoy (1983) and Hoy and Miskel (1987) that specifically highlighted the importance of the school system components of **structure, environment, employees, management/leadership, communication, and decision-making**,

(d) the research of **effective schools, effective teachers, and effective principals**, during the past decade, in particular, by innumerable proponents [Anderson, Edmunds, Goodlad, Kindsvatter, Sergiovanni and Walburg (to mention but a few)].

The survey of these four types of literature resulted in the extrapolation, analysis, and ranking of thirteen school system components by a tabulation of their permanence and prominence in the evaluation literature

of the 1970's and 1980's. These thirteen components constitute the **LINC** ***interactive*** **Model** (Table 10.1).

Table 10.1 : **THE LINC *interactive* MODEL:**

(Figure 6.1 reproduced to indicate the 13 components of the LINC model as garnered from the Data tabulated re Review of the Literature (Chapter 7) relative to Educational Evaluation, School Systems, Organizational Effectiveness, and Effective Schools.)

1. **Goals** *(operative and operational)*
2. **Environment** *(external)*
3. **Leadership** (management)
4. **Structure** *(division of labor, role differentiation. etc.)*
5. **Work Force** (employees)
6. **Interaction** (inter-relatedness & interdependency)
7. **Process** *(transactions)*
8. **Decision-Making** (collegial? hierarchical?)
9. **Work Place** (climate)
10. **Culture** *(shared assumptions, norms, ideas)*
11. **Change** *(adaptability)*
12. **Communication** *(feedback)*
13. **Curriculum** *(program)*

Conclusion: The study, therefore, has developed components that have tended to be neglected in evaluation approaches of school systems. The thirteen components of the LINC interactive Model for evaluating school systems are not purely statistical constructs obtained solely through quantitative analysis. They were derived from a combination of examination of the statistical findings and an interpretation of the research results. This is a factor that is the relative basis of qualitative analysis and, therefore a major consideration in examining the study.

Sub-Purpose # 5: To compare the school system components derived in the four-fold search of the literature with

the theoretical approaches of the five prominent theorists.

The first obvious question to be answered is: How did they compare? Table 10.2 reveals the similarities and differences of each of the five theorists models and the components of the **LINC *interactive* Model**.

Table 10.2: Comparison of the Models of the Five Theorists & the LINC *interactive* Model.

Component [LINC Model]	STUFFLEBEAM CIPP	PROVUS DEM	STAKE Resp/Count	SCRIVEN GFE	EISNER C & C
GOALS	YES	YES	NO	NO	NO
ENVIRONMENT	YES	YES	YES	PART	PART
LEADERSHIP	NO	NO	NO	NO	NO
STRUCTURE	NO	NO	NO	NO	NO
WORKFORCE	NO	NO	NO	NO	YES
INTERACTION	NO	NO	PART	PART	YES
PROCESS	YES	YES	YES	YES	YES
DECISION-MAKING	YES	NO	NO	YES	NO
WORKPLACE	NO	NO	NO	NO	YES
CULTURE	NO	NO	NO	NO	YES
CHANGE	NO	NO	YES	NO	YES
COMMUNICATION	NO	YES	YES	YES	YES
CURRICULUM	YES	NO	YES	NO	YES

Conclusion: At first, this writer saw the comparison of the theories of the five leading theorists and the evaluation of school systems as comparing "apples" and "oranges". Since that initial fray into evaluation, some aspects of the approaches used by these five theorists have been acknowledged as being very applicable to school system evaluation. Although none of the models of the five theorists were, as a whole, fully applicable to the evaluation of school systems, many of their **theoretical** precepts and postulates were. As a result, they contribute to any evaluation framework and, more particularly, to the important techniques that evaluators must apply throughout the evaluation

process. Scriven (1967), Stake (1967), and Stufflebeam (1971) all posited that the needs of the sponsor of the evaluation usually determined to a considerable degree the outline and course of the evaluation. Their contributions to educational evaluation range from Stake's Countenance/ Responsive Model depicting the significance of stakeholders, to Scriven's GFE process of judging the extent to which "intents" are met, and to Stufflebeam's CIPP model of evaluating for decision-making. Moreover, all evaluation models from Provus (1971) to Partlett and Hamilton (1972) and from Eisner(1975) to Shapiro (1978), include evaluation performed by observation, description, inquiry, analysis, and interpretation in order to render "a formal assessment of the worth of educational phenomena" (Popham, 1987).

Again, there is no doubt that the major direction of examining discrepancies in both the models of Provus (1970) and Scriven (1967), the DEM and GFE respectively, have been used in many evaluations. Philip Carter (1988), a former Director of Program Evaluation with the Nova Scotia Department of Education, revealed that Provus' DEM was the basis for much of the curriculum evaluation undertaken in the province of Nova Scotia during the late 1970's and early 1980's. For example, when a review team conducted on-site visitations as part of their evaluation process of a district school system, one of the major directions given to each member of the program evaluation team was to search for discrepancies in the programs prescribed by the Department and in the application of these programs to the specific school system being reviewed. The latest outline of a systems model for schools (Figure 10.1) reveals the inclusion of such evaluation strategies as judging the discrepancy between standards and performance.

In comparing the approaches of the five leading theorists and the **LINC *interactive* Model**, it becomes immediately evident that all five theorists have a theoretical perspective. The 'group of five' exemplify theory; the 'LINC' a model. So, how do you compare the two? Being a model, the **Linc *interactive* Model** is quite different in that it is a collection of variables; i.e., of thirteen components. A model should tell how these variables hang together, that is, how they interrelate, and interact -- one of the major purposes when evaluating a school system. As a model, the 'LINC' approach towards school system evaluation is an improvement in that it is more practical in its application of what components should be evaluated. The **LINC *interactive* Model** is a very functionalist paradigm. Critical theorists and post modernists would view the model as being fundamental and pragmatic in its assumptions and approach.

Sub- Purpose # 6: To analyze selected Nova Scotia evaluations with the new approach school systems evaluation. As a means of testing the model, in Chapter IX each component was applied to three of the twenty-six school system reviews conducted in the province of Nova Scotia from 1979-1991; namely, the Northside-Victoria District School Board (NVDSB, 1985), the Dartmouth District School Board (DDSB, 1988), and the Halifax County-Bedford District School Board (HCBDSB,1991).

Conclusion: In analyzing the Nova Scotia evaluation process, it became very obvious that evaluators were concerned with what is -- never with what may or should be. As mentioned previously, emphasis in the Nova Scotia reviews (HCBDSB excepted) has been primarily on curriculum alignment with the Department of Education objectives/guides and on the board and Central Office operations. The other twelve components of the

LINC *interactive* Model are seldom, if ever, alluded to. Six of the LINC components; namely, **leadership**, **structure**, **communication**, and **goals** are alluded to in the reports under the Board and Central Office Management section, and the **workplace** and the **workforce** in the section re Support Staff. No mention is made in these surveys of the other **LINC *interactive* Model** components of **decision-making**, **environment**, **process**, **interaction**, **culture**, and **change**.

Basic/Overall Purpose of the Study: The basic and overall purpose of the study was stated to formulate, from a review of the pertinent literature, an evaluation framework that incorporates the best dimensions and components unique to school systems, thus providing more effective criteria and indicators for evaluating school districts.

Conclusion: This basic purpose culminated in the formulation of a new model towards the evaluation of school systems -- the **LINC *interactive* Model** -- consisting of thirteen research based components derived from a review of the literature pertaining to educational evaluation literature and theories, school systems, organizational effectiveness and effective schools. It is most important to test each of these components; e.g., the LCD components (i.e., Leadership, Communication, and Decision-making. Each of these three are interactive elements in that any good leader must possess good communication and decision-making skills. Again, the four "Nexus" elements of environment, goals, structure, and process are determined one by another (i.e., environment often determines goals, which in turn determines the process and the structure. In the "C" part of the **LINC *interactive* Model**, all three are interrelated and depend upon each other

The model is based on the open system classification of school systems defined by Ingram and Milkos (1980) as "an entity which exists in its surroundings, [and] draws on an environment for support [while] producing a service the environment finds important" (p. 10). In testing the model against three of the twenty-six Nova Scotia reviews (the NVDSB, DDSB, and the HCBDSB), it became most evident that public school systems in Nova Scotia are loosely coupled, not open.

Utility of the LINC *interactive* Model

How do you use it? Is the approach suitable for evaluating school systems? The focus of school system evaluation should begin with real concerns and lead to utility. How to interpret and utilize the information gleaned from this study is a particular relevant concern for this writer.

Firstly, the model is a measure of the extent to which each component, through interaction, has attained a desired result. In judging the component, the framework provided in Chapter VIII, along with each of the appendices, should help in manifesting that interaction. Secondly, one must judge the whole to ascertain the congruence or fit of each component with one another. In assessing the function of fit, the greater the degree of congruence, the more effective the system. For example, does the "vision" of leadership permeate every other component of the **LINC *interactive* Model**? Thirdly, one must judge interaction as a global or holistic totality in assessing how each component achieves a desired result with each of the other components. A particular significant example is to be found in the interaction of Leadership, Communication, and Decision-Making .... the LCD components of any institution. Such a judgement of fit, totality, and interaction of the thirteen

components provides a measurement of accountability of the school system.

It is the hope that by using the **LINC *interactive* Model**, an evaluator would examine:

(a) the administration, staff, and stakeholders (i.e., **leadership** and the **workforce**) and the resources of the **environment** to ascertain whether or not they have a clear, informed vision of what they want their school district to become (Sergiovanni & Starratt, 1988),

(b) how these visions are translated into **goals** for their school system and into expectations for administrators, staff and students (Cangelosi, 1991),

(c) whether the approach to **decision-making** is through policy handbooks (SOP's) that reflect current theoretical and practical approaches to decision-making policies and procedures

(d) whether the **workforce**, **structure**, and **workplace** have been well established to support these goals and expectations;

(e) the **interactions** of **process**, **culture**, **curriculum** and **communication** in producing **change** and desired improvement in a school system (Fullan, 1992).

In each of the Nova Scotia School System Reviews performed from 1978-1991, innumerable recommendations were made concerning the operational components of the school districts. In a survey conducted on the "Usefulness of School System Survey Recommendations to School Boards of Nova Scotia" (Lawson & MacLellan, 1988), the researchers evaluated the implementation and significance of recommendations made from 1979-1987 in Nova Scotia School System Reviews. Of the 1388 recommendations evaluated by Superintendents and their colleagues, 1024 (approximately

80%) were deemed to be crucial and important. As a result, they were fully or partly implemented.

One glaring and ironic conclusion from such an investigation, however, bothers the investigator. While the investigation deemed 1024 recommendations important or somewhat important, where was the networking between school systems? the inter-relatedness between staff? or the dimensions of individual or group leadership? For example, ten of the major recommendations regarding curriculum/ programs that appeared in the Hants West District School Board Review of 1983, reappeared in the Yarmouth District School Survey of 1986 and the Cumberland District School Board's Review Report of 1987. The same deja vu scenario repeats itself with many of the other school system components; namely, the incessant recommendations for **goal** statements, standard operating procedures (SOPS) for **decision-making**, job descriptions re **structure**, and development of supervision **processes** --- many of which, incidentally, were reprised in the HCRDSB Review Report (1991). A case of deja vu or inept leadership?

The failure to use evaluation findings has assumed the portions of a national scandal in the United States. Guba and Lincoln (1982) claim that such a failure "illustrates the poverty of traditional evaluations, which are likely to fail precisely because they do not begin with the concerns and issues of their actual audiences and because they produce information that, while perhaps statistically significant, does not generate worthwhile knowledge" (p. IX). The final report cannot, as in the case of the Halifax District School Board survey of 1985, produce recommendations that, in the opinion of system administrators had already been enacted over past years. A study of Nova

Scotian evaluations (1979-1988) by Lawson and MacLellan (1988) not only indicated the importance of recommendations to school systems, but also the necessity that such recommendations be followed up. As Erlandson (1973) notes, "an evaluation, like the X-Ray, is useless unless specific action is taken to change the conditions that have been discovered" (p. 25).

Stufflebeam (1974) maintained that "to meet standards of utility, evaluation reports must be informative to practitioners and must make a desirable impact on their work" (p. 7). Furthermore, Stufflebeam asserted that to be useful, an evaluation must address all issues of interest and must be credible, timely, persuasive and informative from a grassroots perspective. Such a purposeful focus must also be seen as non-threatening, responsive, meaningful and useful. In stark contrast to such a focus, Edward A. Suchman (1985), spoke facetiously of three kinds of evaluation: the EYEWASH (justifying a weak program with bias reporting), the WHITEWASH (covering up a failure by not being objective), and the SUBMARINE (destroying a program regardless of its worth, just to be rid of it!)

Empirical studies regarding the major concerns with evaluations by decision makers indicate that the vast majority are concerned with "bottom lines"; that is, a desire to know very tersely and succinctly how the school system is performing. A good example can be taken from the "bottom line" conclusions of the accreditation results of Canadian hospitals where each department is judged on a scale from poor to excellent. In school system evaluations, case studies a la Eisner or Stake may read well and be interesting, yet, the specificity, not the generality, is what chief executive officers usually want.

Procedures for Implementation

System evaluation reports are usually made available to individual school boards and their senior administrators before the document is made public. Such a procedure has always been the format followed in the Nova Scotia School System Reviews. It is very important that the results of the evaluation study are communicated widely in order that everyone is cognizant of the conclusions (Alkin, 1979). The report is carefully analyzed (especially the recommendations) by appropriate system groups, incorporated into a strategic plan (i.e., a formalized action process that identifies individuals or groups responsible for implementation of recommendations). Time parameters are set for periodic up-dates and completion. For example, after receiving the Lunenburg School District's survey report (1988) from the Nova Scotia Department of Education officials, the senior administrators prepared for the Board a document detailing each recommendation (classified according to sub-units of the system -- finance, curriculum, etc.) and the state of the action being taken (i.e., time parameters, responsible individual(s), progress to date, etc.). The Northside-Victoria District School Board instituted a similar procedure upon receipt of its 1985 report as did the DDSB in 1988. The HCBDSB is presently in the process of implementing similar action on the recommendations contained in its 1991 Review Report.

All these examples are typical of Fullan's (1986) idea of a "realistic implementation plan" where responsibilities for the implementation of various items are assigned to various people over a long period. Fullan cautions that such plans must be manageable, have individual or team expertise, and be supported by resources of the local school system. Newton and McKinnon (1990) assert that "there is no question that the test of a school

system evaluation is the extent to which follow-up activities and improvements occur" (p. 13). School system evaluations must delineate a genuine focus on change and improvement and not, as Newton and McKinnon (1990) explain, on "window dressing, political gain, or merely meeting a government mandate" (p. 13).

CONCLUSIONS

Importance of Stakeholders

From personal involvement with three of the Nova Scotia school system reviews, this writer has seen the need for a community of participating evaluators and evaluation networks. A strong partnership involving university professors, Department of Education officials, local and neighbouring school administrators, community personnel, students, etc. should form an evaluation team. The Cooperative Review evaluation of the King's County Amalgamated School Board (1979) used such a team of evaluators with great success; yet, ironically a similar evaluation team format was never used in subsequent reviews of N.S. school districts. The evaluators of the Wheatland, Alberta school system (1989) included staff and trustees from other school districts and personnel from neighbouring universities and communities; in fact, approximately 22 per cent of the team was composed of non-educational departments. Stakeholders must be part of process. Dinkel et al (1982), Kurmer (1986), Conley (1987) and Newton and McKinnon (1990) see such possible reactions and interactions with others as enhancing a sense of ownership in the evaluation process.

Participants in evaluation, however, must possess credibility -- especially the outside specialists and generalist evaluators or agencies

(Stufflebeam and Webster, 1986). While their independence is important, these evaluators must establish liaison roles with system personnel and develop on-line access to all stakeholders involved in the evaluation. Guba (1986) asserted that such close links between evaluators and the Superintendent's office constitute, through collaboration and teamwork, the strengths of an evaluation.

The Evaluator

Evaluation encompasses a number of highly significant interpersonal relationships and vested interests. As a result, the accuracy of evaluation judgement may often depend on the quality of the interface activities between the evaluator and the personnel involved. Evaluation reports have been known to be superficial. As Newton and MacKinnon (1990) agree, "people go to great lengths to present a positive picture of the system which may or may not be representative" (p. 1) or as House (1973) comments, "feverish attempts have been made [by administrators] to present the school district as a happy family" (p 64).

An evaluator (controller) with expertise is very essential even when the evaluation is a cooperative endeavour. Regardless of how extensive the preparation for an evaluation is or how effectively it is performed and presented, the process and product will have little utility or value unless it is controlled by one individual. Such a statement does not negate collaboration. It simply asserts (in full realization of what many theorists have warned regarding bias, values and corruption) that somebody ... someone ... must ultimately be in charge!

Accountability and the Need for School System Evaluation

Educational evaluation of school systems is a relatively recent activity in the field of education. Popham (1975) attributes the impetus of school system evaluation in the 60's and 70's as a reaction to the accountability movement -- a force that has ensued to the present day. In the 80's and 90's, teacher unions, rising educational costs and taxes, public disenchantment, failure of centralization, and incessant educational crises, have altered the educational setting to the point that **accountability** is now being called for by many segments of society (Barber & McCellan, 1987). As exemplified in a recent MacLean's magazine cover feature by Fennell et al. (1993), one needs only to stay attuned to any form of major news media to be inundated with articles regarding the inadequacy of today's school systems (Lam, 1991).

Foremost in education today is this demand for accountability, now used as the overall label for concerns of effectiveness, efficiency, economy, equality and excellence in education (Snyder, 1983; Cibulka, 1987; Verstegen, 1990; Flemming, 1991; Ornstein, 1991; Ward, 1991). A shifting paradigm of control and change, characterized by an environmental infusion of interest groups, collaborative planning, and teacher empowerment has made evaluation an essential issue and concern for all school systems. Significant changes in the public attitudes toward public school systems were revealed in the CEA (Canadian Educational Association) 1990 poll where 62% of the public surveyed indicated that our schools have remained the same or have become worse (p.18).

As a result, the question, "why evaluate?" no longer arises since educators and the public have become well aware of the advantages of systematic evaluation. These advantages include providing information for

action, contributing to the rationalization of decision making (Weiss,1972), strategically planning, adjusting and structuring the school system (Newton and McKinnon, 1990) and fostering individual growth, system improvement, and organizational accountability (Conley, 1987).

The Emergence of the "14th" Component

Since the review of literature centered upon the literature of the 1970's and the 1980's, much drastic change has occured during the last four years. As a result, many of the rankings and the inclusion of certain components may be outdated and changed.

Of all the components currently emerging as significant to school system evaluation, no factor has been more pronounced during the late 1980's and early 1990's as the **politics** of education. As Bacharach and Mitchell (1987) posited: "educational organizations are best understood as political systems, both internally and in their external relationships" (p. 238). Their members are political actors and their decision-making processes confined to a political arena of interest groups and coalitions. Nearly all those associated with public school systems today realize that they have become embattled political entities, striving to mediate conflicting and challenging demands of teachers, minorities, unions, colleges, courts, and the provincial treasury. It seems today that educators not only labor in the school system but also struggle in the political arena.

In examining the dynamic political component of school systems, one would assess the following:

(a) **constant tactical power struggles at all levels of the school system** (Lotto, 1982),

(b) **formal vs. informal power**, i.e., having one's views reflected in outcomes (Lotto, 1982),

(c) **interest groups** from the environment (e.g. PTA, French Parents Associations., etc.) and from the workplace (e.g. NSTU, CUPE) (Baldridge and Deal, 1983),

(d) **decision-making** in a political arena (witness the closing of a school or the decreasing of staff!) (Meyers et al.,1978),

(e) all **individuals** (the political actors) who promote their own needs interests and objectives through their own uniquely devised strategies (Beck, 1981).

In the Nova Scotia school system evaluations, it is remarkable the number of "first draft" evaluations that have been changed considerably, not because of grammatical errors, but because of the political "flack" that might result. In Nova Scotia school surveys, the original substance of a school system evaluation often is altered considerably by the time it passes through numerous members in the echelon of the Department of Education (Muir, 1989). It is at this stage of the process (Departmental Review) that evaluation becomes a very sensitive and political issue. The editing of a final draft actually dictates who controls. Too often the political dominance by professional bureaucrats, usually for their own benefit or protection of others, creates a complete imbalance in the information originally garnered and the information eventually provided. Such a condition underscores a neglected potential of evaluation -- the need for the participation of citizens as informational sources in evaluations and as participants, however passive or active, in the process. The very fact that most citizens can be free from political commitment is an asset in reviewing the components. Or can they? Dianne

Cameron (1982) posits that "when evaluation is a public act, it becomes a political activity in which power and powerlessness become critical" (p.38).

Newton and McKinnon (1990) concluded that it is not always easy to 'tell it like it is', given the sensitivity of some issues and the potential impacts on the careers of system administrators. In their Wheatland (Alberta) evaluation, they posit that, "as with similar system evaluations, agreement on the content of the final report is a major difficulty" (p. 11). Already mentioned, in reference to the DDSB Review, is the fact that many evaluation conclusions, because of their political sensitivity, are excluded from the final report.

The Need for Further Study

Even with the practical and theoretical considerations, the question arises as to where does one go from here? The model has presented what components should be evaluated, but such a formation of a model now leads one to further study as to how to evaluate these thirteen interactive elements.

Suggestions have been already made in Chapter VIII regarding the evaluation of the evaluation process .. especially listing the varied instruments that are available. Further possibilities are provided in the appendices which offer overall guidelines for the evaluation of each of the thirteen components of the **LINC *interactive* Model**. The evaluator is cautioned that each of the checklists for evaluating each of the thirteen components is a guide only. While confusion may arise in the fact that the traits listed for each component are too wide and all encompassing, such characteristics have been included in order that the evaluator may consider all possibilities when judging each component. In the Leadership Checklist (Appendix 8.1), for example, the qualities of the various styles of leadership

are given. The reason is that the evaluator should consider every contingency of leadership that can be explored. The checklist does not assume that one may be better than the other but, it is predicated on the fact that evaluators, having an informed belief system through training in evaluation and in school systems, should be able to judge both the positive and negative aspects of each component and its various nuances.

There is a tremendous concern regarding the approach to leadership. Since the research for this study was done on leadership in the 1970's and the 1980's, there has come into being a more participatory definition of leadership. The present day view of leadership focuses on the empowering style of governance and touts the principle that everyone has the right to influence decision-making. For example, in evaluating the Leadership component, Sergiovanni's (1984) model of excellence in leadership is used as a framework. This notion of strong leadership, may not be in tune with current and post-modern notions of leadership where emphasis is placed on transformational and symbolic kinds of leadership. But a closer look at the suggested variables for evaluating the leadership component does reveal many of the qualities of transformational leadership and more specifically, those of symbolic leadership. All of the characteristics given are positive; their composite should reveal the state and kind of leadership being practiced in the school system.

Consider also structure and decision-making. In the checklist for decision-making (Appendix 8.3) or for structure (Appendix 8.5), every conceivable contingency and theory of decision-making and structure is listed in order that the evaluator may judge all the particular characteristics of those components and that, moreover, the recipient(s) can be aware of the many

theories of practices (good and bad) that are prevalent in school systems.

When the holistic use of the model is promulgated, is it possible to collect sufficient data for 13 components? Ratsoy (1983), in his "frying pan" model, argues that no system can systematically collect all of the data required to evaluate a school system. Worthen and White (1987), on the other hand, present some excellent suggestions for engaging in the evaluation of educational and social programs, proposal reviews, on-site evaluation and evaluation contracts. The LINC interactive Model , while comprising thirteen components, can systematically evaluate each of its "links" and their interaction. In the HCBDSB, seven of the thirteen components and their interrelatedness, were evaluated within less than six weeks.

The **LINC *interactive* Model** overcomes the litany of other models, of the rote practice (particularly in the Nova Scotia school system reviews, of simply looking at what is ... not of searching for what may or should be. The ritualistic practice of the Nova school system reviews does not foster improvement or change ... perhaps corrections of alterations ... but not systemic improvement or change since these surveys were merely reports of the status quo of what is or has been. Read one review (HCBDSB excepted), and basically, you have read all of the other twenty-four.

The need for further study is also predicated on the fact that the literature of the past five years has changed drastically from the literature of the past two decades. If one were to review the educational evaluation literature from 1989-1994, it would not be surprising to witness the change in the ranking of the components of the **LINC *interactive* Model** and the disappearance of some components altogether to be replaced by others. For example, goals would be displaced in favor of "mission" and "vision"

counterparts, and other components, such as politics, would be included. The **LINC *interactive* Model**, unless revised every five years, will tend to be dated. The cyclical nature of evaluation demands that components be continually re-evaluated and/or revised themselves to make the model relevant to the age.

Quo Vadis?

The theory building for school system evaluation must continue. Steinmatz (1976), Wolf (1984), and Evered (1985) concluded that there was still a need for more research in relation to school system evaluation processes. Newton and McKinnon (1990) claim that, if we are to avoid problems presently encountered by the vastly different ways in which information about school systems is reported, more attention "needs to be given to the development of indicators of effective systems, to performance standards and to the development of common instrumentation" (p. 17). When this writer began this study, no single framework sufficed one's perception of a universal and meaningful approach to school system evaluation. Now from the insights into the wide variety of models and their precepts, from the extensive literature research conducted in this study on educational evaluation and school systems, and from the extrapolations of concrete evaluative practices and indicators, I have been able to organize my own insights and intuitions into a coherent framework that culminated in the **LINC *Interactive*** Model. It is the hope that the **LINC *interactive* model**, conceptualized from literature research and comprising thirteen effective system components, will aid in building an approach towards school system evaluation.

Evaluation of school systems is imperative in order to facilitate a

system renewal for growth and development. There is a relationship between evaluation and its ultimate purpose of enhancing the improvement and growth in the quality and performance of students through evaluating a school system's performance and providing recommendations for improvement. Evaluation should be designed to strengthen and improve a school system. By distinguishing specific components and characteristics of school systems, certain behaviours can be identified which influence student learning, enhance student outcomes, and increase effectiveness and efficiency.

Accountability, efficiency, and excellence are major managerial concerns in education today. Evaluation has, therefore, a watchdog function. Considering the complexity of school system assessment and the vital importance of credible and useful evaluation reports, society must invest in the training and employing of evaluation specialists rather that generalists. It is in purposeful planning, structuring, and reporting that an evaluation can illuminate the entire school system through the use of key components as in the **LINC interactive Model** -- fully realizing that in the correct organizational context, it is improvement and the ability to change that are among the greatest concerns to school systems today. Hon. Lynn MacLeod (1989) as quoted in Learning for the Future (1991], stated "increased relevance (is being given today) to changing social and economic needs and to stronger relationships between the sectors of the education system, as key components of determining a strong and effective education system" (p. 38).

If we do not begin to evaluate our school systems in the light of these contextual changes, we pay a severe price in future generations. We must adapt and modify our educational systems to keep abreast of changing times. We have already paid the penalty of not being vigilant. Declining staffs,

shrinking budgets, school closures and radical/cultural violence are but a few symptoms of past neglect. Only by galvanizing evaluation as a part of our educational process school can we be assured that education is in tune with the future.

APPENDIX

EACH OF THE APPENDICES ARE DENOTED BY THE NUMBER 8 (FOR EXAMPLE, 8.1. 8.2, 8.3, ETC.) TO CORRESPOND WITH EACH OF THE THIRTEEN SECTIONS OF CHAPTER 8.

CHECKLIST 8.1: EVALUATING LEADERSHIP

The following check list of leadership forces are indicators of effective school leadership. Using Sergiovanni's (1984) conceptualization of leadership as a framework, the first three forces reflect competence in leadership (literally, T.H.E., i.e. Technical, Humanistic, and Educational), but their presence does not guarantee leadership. Symbolic and cultural forces (the "value added" components) reflect and equate to excellence in leadership. The five key indicators of the component, leadership, can easily be remembered by the acronym, C.H.E.S.T. [i.e. Culture, Humanistic,...]

8.1.1: Technical (Management Engineer)	YES	NO
Sound managerial skills	-----	-----
Task oriented	-----	-----
Assertive	-----	-----
Strategic Planner/Policy Maker	-----	-----
Loyalty to organization	-----	-----
Nonpersonal approach	-----	-----
Rules and regulations a priority	-----	-----
Top-down management	-----	-----
Close system orientation	-----	-----
Reliance on Theory X	-----	-----
Focus on organizational goals	-----	-----
S.O.P.'s (Standard Operating Procedures)	-----	-----
Systems approach	-----	-----
Close supervision/tight control	-----	-----
Subordinate compliance required	-----	-----
Measured accountability	-----	-----
Uniformity in dealing with problems	-----	-----
Summary: Technical Leader	-----	-----

8.1.2: Humanistic (Human engineer)	YES	NO
Human Resources manager	-----	-----
Collaborative/Collegial	-----	-----
Uniqueness in dealing with problems	-----	-----
Motivating	-----	-----
Trusting	-----	-----
Considerate	-----	-----
Rules stated as alternative	-----	-----
Acknowledges individual competencies & needs	-----	-----
Strong communicator	-----	-----
Theory Y orientation	-----	-----
Interpersonal competence	-----	-----
Relaxed work environment	-----	-----
Supportive	-----	-----
Encourages individual growth and creativity	-----	-----
Builds and maintains morale	-----	-----
Informal communication important	-----	-----
Conflict resolution stressed	-----	-----
Summary: Humanistic Leader:	-----	-----

8.1.3: Educational (Clinical Practitioner)	YES	NO
Transactional Leader	-----	-----
Diagnoses educational problems	-----	-----
Instructional Leader	-----	-----
Provides supervision and evaluation	-----	-----
Monitors curriculum	-----	-----
Staff developer	-----	-----
Program planner	-----	-----
Knowledgeable of educational pedagogy	-----	-----
Emphasizes and monitors student achievement	-----	-----
Alignment of planning, instruction, and evaluation	-----	-----
High expectations of students	-----	-----
High expectations for teacher	-----	-----
Provides positive feedback	-----	-----
Encourages efficient use of time	-----	-----
Designs procedures to minimize disruptions	-----	-----
Uses materials and personnel resources creatively	-----	-----
Creates an academic climate conducive to learning	-----	-----
Summary: Educational Leader	-----	-----

8.1.4: Symbolic (Chief)	YES	NO
Transformational Leader	-----	-----
Change agent	-----	-----
Creates icons; promotes myths	-----	-----
Communicates clarity, consensus, and commitment	-----	-----
Models goals and behaviours	-----	-----
Creates a shared sense of belonging	-----	-----
Creates a school identity	-----	-----
Summary: Symbolic Leader:	-----	-----

8.1.5: Cultural (High Priest)	YES	NO
Visionary Leader	-----	-----
Develops collaborative mission	-----	-----
Builds shared assumptions	-----	-----
Builds shared purposes	-----	-----
Builds shared norms, values, beliefs	-----	-----
Builds commitment	-----	-----
Communicates system's mission	-----	-----
Socializes new members	-----	-----
Defines uniqueness	-----	-----
High integrity	-----	-----
Rewards those who reflect culture	-----	-----
Provides source of meaning and significance	-----	-----
Creates shared governance	-----	-----
Moral Leadership	-----	-----
Summary: Cultural Leader	-----	-----

CHECKLIST 8.2: EVALUATING COMMUNICATION

Communications is an integral component of effective schools that permeates every aspect of school life. Communication underlies virtually all organizational and administrative variables, including formal structure, informal organization, culture, and motivation. Communication forms the linkage and interaction between the individual, the organization and the environment, and, in particular, with leadership and decision-making, the L.C.D of effective educational administration.

8.2.1: ORGANIZATIONAL CONSIDERATIONS

(a) Formal Communication Considerations:	YES	NO
Communication channels link all members	-----	-----
Communication is direct and short	-----	-----
Communication is clear and open	-----	-----
Internal feedback loops	-----	-----
Knowledge of communication channels	-----	-----
Complete line of communication typically used	-----	-----
Use of technology	-----	-----
Accuracy	-----	-----
Summary: Effective formal communication	-----	-----

(b) Informal Communication Considerations	YES	NO
Aware of informal groups	-----	-----
Use of grapevine	-----	-----
Horizontal flow	-----	-----
Diagonal flow	-----	-----
Knowledge of audience (needs and biases)	-----	-----
Combines feedforward and feedback	-----	-----
Aware of informal leaders	-----	-----
Avoid second-hand misinterpretation	-----	-----
Summary: Effective informal communication	-----	-----

8.2.2: INDIVIDUAL CONSIDERATIONS	YES	NO
Clarity of language	-----	-----
Assessable	-----	-----
Approachable	-----	-----
Responsive to concerns and aspirations of others	-----	-----
Purposeful communication for sender and receiver	-----	-----
Effective timing	-----	-----
Repetition and reinforcement	-----	-----
Sensitivity to bias	-----	-----
Use of common symbols	-----	-----
Effective listener	-----	-----
Authentic communicator of trust	-----	-----
Summary: Effective Individual Communication	-----	-----

8.2.3: ENVIRONMENTAL CONSIDERATIONS	YES	NO
Open system	-----	-----
External feedback loop	-----	-----
Awareness of "noise"	-----	----
Considers level of uncertainty	-----	----
Considers complexity of organization	-----	-----
Knowledge of inputs:		
Resources	-----	----
Values	-----	-----
Technology	-----	----
Interest groups	-----	-
Demography	-----	---
Boundary Spanner	-----	----
Scans environment	-----	----
Buffers	-----	-----
Alliance builder	-----	----
Provides pertinent information to stakeholders	-----	-----
Adaptive to change	-----	-----
Summary: Effective Environmental Communication	-----	-----

CHECKLIST 8.3: EVALUATING DECISION-MAKING

The following check list of indicators for assessing the component, DECISION-MAKING, aligns with the framework established in Chapter 8.3.

8.3.1: MODELS OF DECISION-MAKING:

(a) Classical Model (Optimizing)	YES	NO
All relevant information available	-----	-----
All alternatives considered	-----	-----
All consequences evaluated	-----	-----
Best alternative chosen	-----	-----
Summary: Rational Decision-making	-----	-----
(b) Administrative model (Satisficing)		
Not all pertinent information available	-----	-----
Limited alternatives considered	-----	-----
Limited evaluation of consequences	-----	-----
Best of limited comparisons selected	-----	-----
Reliance on theory and experience	-----	-----
Summary: Normative Decision-Making	-----	-----
(c) Incremental Model (Successive limited comparisons)		
Cannot define relevant alternatives	-----	-----
Appeasing	-----	-----
Uncertainty and conflict high	-----	-----
Consequences of each alternative not predicted	-----	-----
Successive limited comparisons employed	-----	-----
Tentative and reversible decisions emphasized	-----	-----
Summary: Muddling through	-----	-----
(d) Mixed Scanning (Adaptive satisficing strategy		
Focus on broad ends and tentative means	-----	----
Decisions consistent with policies	-----	----
Limited analysis of alternatives	-----	-----
Successive comparisons	-----	-----
Summary: Routine Decision-Making	-----	-----
(e) Garbage Can Model (Multiple organizational DM)	YES	NO
Multiple decisions in environment of uncertainty	-----	-----
Solutions in search of problems	-----	-----
Problems persist	-----	-----
Decisions a product of individual choices	-----	-----
Summary: Random Decision-making	-----	-----

8.3.2: ADMINISTRATIVE CYCLICAL PROCESS STRATEGIC PLANNING [I.D.E.A.]	YES	NO
Identified & Defined the problem	-----	-----
Diagnose and analyzed the difficulties	-----	-----
Established & Elected Criteria for problem solving	-----	-----
Action Plan for strategic action	-----	-----
Monitored the process through a designed stages for continual evaluation	-----	-----
Long-range planning in vogue	-----	-----
Summary: Strategic planning operationalized	-----	-----

8.3.3: SHARED DECISION-MAKING	YES	NO
Stakeholders participate	------	-----
Staff empowered	-----	-----
Students input allowed	-----	-----
Collaboration fostered	-----	-----
Consensus forming employed	-----	-----
Summary: School Based Management	-----	-----
Decentralized Decision-Making	-----	-----

CHECKLIST 8.4: EVALUATING INDIVIDUALS (THE WORK FORCE)

The following check list of WORKFORCE indicators aligns with the frameworkestablished in Chapter 8.4 and is based partially on the writings of Miller (1981). Sergiovanni & Starratt (1988), and Hoy & Miskel (1991).

8.4.1: Employee Behaviour	YES	NO
Group is cohesiveness/Good working relationship	-----	-----
Exhibit confidence & trust in each other	-----	-----
Loyalty/Commitm[illegible] System	-----	-----
Staff socialization is high	-----	-----
Evidence of a positive outlook	-----	-----
8.4.2: Motivation		
Job Satisfaction is high	-----	-----
High level of morale exi361sts	-----	-----
Enthusiastic/Willing	-----	-----
Long Tenured staff	-----	-----
Evidence of Rewards/Praise/Awards	-----	-----
Change agents prevalent	-----	-----
8.4.3: Collegiality/Collaboration		
Shared and accepted values and goals	-----	-----
Shared Decision-Making & Problem Solving	-----	-----
Employees are empowered	-----	-----
Peer Coaching/Team Teaching	-----	-----
School based teamwork	-----	-----
8.4.4: Professional Development		
High engagement in professional pursuits	-----	-----
In-services a priority	-----	-----
Self reflection re instructional facets,etc.	-----	-----
Career Ladders available	-----	-----
8.4.5: Informal Organization		
Needs of individuals met	-----	-----
Discussion centers on work	-----	-----
Concern for direction of system	-----	-----
Feedback prevalent	-----	-----
8.4.6: Performance/Expertise		
Possess a highly developed informed Belief System	-----	-----
High expectations re achievement for students	-----	-----
Knowledgable re strategies and methods	-----	-----
Innovative & Creative	-----	-----
Well prepared	-----	-----
Technologically knowledgable	-----	-----
Computer literate	-----	-----

CHECKLIST 8.5: EVALUATING INTERACTION

The following check list of INTERACTION indicators aligns with the frameworkestablished in Chapter 8.5 and is based partially on the research of Sergiovanni & Starratt (1988), Hoy & Miskel (1991), Fullan, Bennett & Rolheiser-Bennett (1990), and Betts (1992)

8.5.1: INTERACTION WITH ENVIRONMENT	YES	NO
Classified as an open system	-----	-----
Liasons established	-----	-----
Interest groups/Political pressure	-----	-----
Adaptation to change and demands	-----	-----
8.5.2: INTERACTION WITH STAKEHOLDERS		
Parental & Community involved	-----	-----
Special Liaison Comittees established	-----	-----
Special Student Services established	-----	-----
Good relations with governments	-----	-----
8.5.3: INTERACTION WITH WORKFORCE		
Socialization & Communication	-----	-----
High interpersonal relationships	-----	-----
High predictability	-----	-----
System improvement team established	-----	-----
8.5.4: INTERACTION WITH LEADERSHIP		
Involved in Decision-Making	-----	-----
Feedback Loops	-----	-----
Shared vision/mission	-----	-----
Flexible structure	-----	-----
8.5.5: INTERACTION WITH GOALS		
Goal setting & participation universally extended	-----	-----
Goal alignment with schools and Central Office	-----	-----
Goal attaimment monitored yearly	-----	-----
8.5.6: INTERACTION WITH WORKPLACE		
Collegiality prevalent	-----	-----
Mutual sharing of concerns	-----	-----
Joint efforts strongly encouraged	-----	-----
8.5.7: INTERACTION WITH CULTURE		
Preservation of system image	-----	-----
Advancement of shared beliefs/ideas	-----	-----
Symbols, icons, history promoted	-----	-----

CHECKLIST 8.6: EVALUATING GOALS

The following check list of indicators for assessing the component, GOALS, aligns with the framework established in Chapter 8.6.

8.6.1: TYPES	YES	NO
(1) Official ... *mission*	-----	-----
Public statement derived from system's mission	-----	-----
Exemplified in all forms of communication	-----	-----
Reflects expectations of stakeholders	-----	-----
(2) Operative ... *vision*	-----	-----
Formulated at all levels	-----	-----
Deals with internal & external operations	-----	-----
(3) Operational ... *target*		
Translated into measurable performance objectives	-----	-----
Activated by middle managers	-----	-----
8.6.2: CHARACTERISTICS:		
Few in number	-----	-----
Specific	-----	-----
Clear/Precise	-----	-----
Difficult/Challenging	-----	-----
Relevant	-----	-----
Meaningful	-----	-----
8.6.3: SYSTEM/SCHOOL LEVELS:		
Appropriate	-----	-----
Adaptive	-----	-----
Aligned	-----	-----
Attained	-----	-----
Articulated	-----	-----
Collaborative/Shared	-----	-----
8.6.4: ACTION PLAN:		
Strategies developed	-----	-----
Person(s) accountable	-----	-----
Monitored/Appraised	-----	-----
Time oriented:	-----	-----
--Short-term (reached within a twelve month period)	-----	-----
--Medium term (reached in a two to five year period)	-----	-----
--Long-term (reached in five or more years)	-----	-----
8.6.5: UNINTENDED/UNANTICIPATED GOALS:		
Discrepancy with stated goals	-----	-----
Overshadow stated goals	-----	-----
More individual than systemic	-----	-----

CHECKLIST 8.7: EVALUATING ENVIRONMENT

The following check list of indicators for assessing the component, ENVIRONMENT aligns with the framework established in Chapter 8.7. (See also pp. 108, 124, 126]

8.7.1: TYPES:	YES	NO
(1) OPEN ... *no boundaries*	-----	-----
Open meetings	-----	-----
Feedback Loops established	-----	----
Interaction with external *people* (parents, groups, etc.)	-----	-----
Interaction with *places* (governmental units)	-----	-----
Interaction with *things* (resources, etc.)	-----	-----
(2) CLOSED ... *impenetrable boundary*	-----	-----
No exchanges/transactions	-----	-----
Feedback loops absent	-----	-----
Internally dependent	-----	-----
(3) GENERAL ... *broader trends*	-----	-----
Involves technology	-----	-----
Involves legal matters	-----	-----
Involves demographical issues	-----	-----
(4) SPECIFIC ... *immediate/direct effects*	-----	-----
Stakeholders involved	-----	-----
Unions instrumental in shaping policy	-----	-----
Politics prevalent at all levels	-----	-----
8.7.2: ENVIRONMENTAL FACTORS:		
Uncertainty	-----	-----
Scarcity	-----	-----
Clustering	-----	-----
8.7.4: ENVIRONMENTAL CONCERNS:		
Staff decreases	-----	-----
Family instability	-----	-----
Unstable economy	-----	-----
Limited resources	-----	-----
8.7.5: ENVIRONMENTAL STRATEGIES:		
Scanning district	-----	-----
Buffering system	-----	-----
Forecasting/Anticipating	-----	-----
Forging linkages with organizations	-----	-----
Spanning to influence perceptions	-----	-----
Strategic planning	-----	-----

CHECKLIST 8.8: EVALUATING STRUCTURE

The following check list of indicators for assessing the component, STRUCTURE, aligns with the framework established in Chapter 8.8, and the literature of Blau & Schoenherr (1971), Mott (1972), Steers (1977, 1980) , Bacharach & Mitchell, (1981), and Sergiovanni & Starratt (1989)

8.8.1: TYPES	YES	NO
(1) FORMAL ... *hierarchical/ bureaucratic/rationalistic*	-----	-----
Formal relationships/authority	-----	-----
Centralized control	-----	-----
Division of labor	-----	-----
Rigidity	-----	-----
Complexity	-----	-----
Compliance	-----	-----
Disciplined	-----	-----
Loyalty promoted	-----	-----
(2) INFORMAL *individual/group oriented*	-----	-----
Group norms valued	-----	-----
Operations decentralized	-----	-----
Flexible relations	-----	-----
Ambiguity evident	-----	-----
Decentralized power & authority	-----	-----
Personable	-----	-----
Sub-cultures active	-----	-----
(3) PROFESSIONAL ... *rational*		
Culture/Values focus	-----	-----
Openness	-----	-----
Empowerment	-----	-----
Shared decision-making	-----	-----
Equality of status	-----	-----
Peer supervision	-----	-----
Professional commitment	-----	-----
Technical competence/expertise	-----	-----
8.8.2 SCHEMA ... *organizational charts*		
Vertical (top-down/multi-layered)	-----	-----
Horizontal (flat)	-----	-----
Non-Linear (professional)	-----	-----
Geographical (sub-systems)	-----	-----
8.8.3 STRUCTURAL FORMS		
Formalization (rules & regulations)	-----	-----
Specialization (departments & positions)	-----	-----
Wide span of control (Supervisors: subordinates)	-----	-----
Technology pre-eminent	-----	-----
Size mitigates against efficiency	-----	-----
Roles very significant	-----	-----

CHECKLIST 8.9: EVALUATING PROCESS

The following check list of indicators for assessing he component, PROCESS, aligns with the framework established in Chapter 9.3.

8.9.1: THE EVALUATION OF PROCESS	YES	NO
(1) OPERATIONAL PROCESSES		
Effective structures for development & implementation	-----	-----
Effective management of resources	-----	-----
Well organized school system	-----	-----
Efficient budgetary controls and practices	-----	-----
Management by objectives	-----	-----
Environmental exchange	-----	-----
(2) TECHNIQUES		
Continuous feedback	-----	-----
Collaborative decision-making	-----	-----
Supervision	-----	-----
Directed behaviour/control is appropriate	-----	-----
Directed behaviour/control is rewarding	-----	-----
(3) SYSTEMIC PRACTICES		
S.O.P's operative; i.e. established procedures	-----	-----
Interaction of components	-----	-----
Monitoring mechanisms: INTERNAL	-----	-----
EXTERNAL	-----	-----
Change catalysts in vogue	-----	-----

8.9.2 TRANSFORMATION PROCESS: IS IT SYSTEMIC?
ASSESSS CONGRUENCE

<<<<<<<<<<<<<<<<<FEEDBACK>>>>>>>>>>>>>>>>>>>>>>
ENVIRONMENT ..... ENVIRONMENT

INPUTS ------>	PROCESS ------>	OUTPUTS
(resources are:	(transformation through:	(outcomes are:
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

ENVIRONMENT ..... ENVIRONMENT
<<<<<<<<<<<<<<<<<FEEDBACK>>>>>>>>>>>>>>>>>>>>>>

==========

8.9.3 PROCESS OF EVALUATION: *STANDARD*		
(a) Utility	------	-----
(b) Feasibility	-----	-----
(c) Propriety	-----	-----
(d) Accuracy	-----	-----

CHECKLIST 8.10: EVALUATING CLIMATE (the WORKPLACE)

The following check list of indicators for assessing the component, WORKPLACE aligns with the framework established in Chapter 8.10 and, more especially, with three inventories: OCDQ, OHI, and PCI [pp.253-55]

8.10.1: TWO PERSPECTIVES:

(1) LOCATION (*Offices, school, libra , etc.*)	YES	NO
Favorably located for maximum performance	-----	-----
Conducive for purpose intended	-----	-----
Well designed	-----	-----
Good use of space	-----	-----
Well equipped	-----	-----
Proximity to resources	-----	-----
Well maintained/repaired	-----	-----
Technologically adequate	-----	-----
Heat/Air ventilators comfortable	-----	-----
(2) CLIMATE (*Atmosphere, ethos, etc.*)		
Conditions of work satisfactory	-----	-----
Environment conducive for performance	-----	-----
Employees feel a sense of importance	-----	-----
Teamwork prevalent	-----	-----
Management exhibits consideration and care	-----	-----
Economic rewards	-----	-----

8.10.2: TYPES:

(a) OPEN/CLOSED		
Informal atmosphere	-----	-----
Hindrances (distractions, frustrations, etc.)	-----	-----
Collegial relationships	-----	-----
Staff engaged in processes	-----	-----
Leadership is helpful & supportive	-----	-----
Motivated workforce	-----	-----
(b) HEALTHY/UNHEALTHY		
Organizational/Institutional needs harmonized	-----	-----
Cognitive and affective needs met	-----	-----
High level of staff morale	-----	-----
Staff commitment	-----	-----
Intimate staff relationship	-----	-----
Essential resources available	-----	-----
(c) CUSTODIAL/HUMANISTIC		
Rigidly controlled	-----	-----
Rules & regulations are clear, consistent, fair	-----	-----
Positive interactions/attitudes	-----	-----
Student centered	-----	-----
Open participation	-----	-----
Respect for all	-----	-----
Self-esteem promoted	-----	-----

CHECKLIST 8.11: EVALUATING CULTURE

The following check list of indicators for assessing the component, CULTURE, aligns with the framework established in Chapter 8.11

8.11.1: TYPES:

(1) INSTITUTIONAL	YES	NO
Regulation & Rules predominant	-----	-----
Dominant philosophies prevail	-----	-----
Artifacts (customs, activities, etc.) practiced	-----	-----
Commitment of all individuals	-----	-----
Business reflects culture	-----	----
Organizational change operative	-----	-----
(2) FORMAL/INFORMAL		
Organizational ideology prevails	-----	-----
Expectations established	-----	-----
Formal leadership	-----	-----
Systemic themes/strategies	-----	----
Individual ideology stressed	-----	-----
Information shared	-----	-----
Shared meanings	-----	-----
(3) SYMBOLIC CULTURE		
Logos and mottos are readily visible	-----	-----
Major themes promoted	-----	-----
Leaders create symbols	-----	-----
Ceremonies/rituals held periodically	-----	-----
Stories told; traditions preserved	-----	-----
(4) FELT CULTURE		
Members feel important	-----	-----
Sense of community emanates workplace	-----	-----
Members identify with organization	-----	-----
Members exude a sense of belongingness	-----	-----
Shared beliefs and values	-----	-----
Reculturing a continuous force	-----	-----
Professional development continually developed	-----	-----
(5) SUB-CULTURES		
Prevalent in departments & committees	-----	-----
District norms. values of individual groups	-----	-----
(6) COUNTER-CULTURES		
Groups vs. Institution	-----	-----
Groups vs. Groups	-----	-----
Micro politics prevail	-----	-----
Resistance by individual interest groups	-----	-----

8.11.2 ALIGNMENT OF CULTURE:

With leadership, structure, environment, etc.	-----	-----

CHECHLIST 8.12.: EVALUATING CHANGE

The following check list of indicators for assessing the component, CHANGE, aligns with the framework established in Chapter 8.12.

8.12.1 (1) CHANGE INDICATORS:	YES	NO
Needs of stakeholders identified	-----	-----
Real needs tested	-----	-----
Information-gathering systems in place	-----	-----
Resources available	-----	-----
Focus directed to improvement	-----	-----
Personnel ready to adopt change	-----	-----
Incentives offered	-----	-----
Process clearly articulated	-----	-----
Timetable realistic	-----	-----
Commitment from administrators/board	-----	-----
Commitment from staff	-----	-----
Commitment from students	-----	-----
Commitment from community	-----	-----
Collaborativeness encouraged	-----	-----
Authority decentralized	-----	-----
Trust conveyed	-----	-----
Risk-taking modeled	-----	-----
Strategic plans in place	-----	-----
Priorities established	-----	-----
Innovation nurtured	-----	-----
Professional development initiated	-----	-----
Monitor mechanisms in place for evaluation	-----	-----
Managers active as change agents	-----	-----
Central Office support given	-----	-----
Holistic system approach adopted	-----	-----
Accountability activated	-----	-----
8.12.2 CHECKING THE FIT		
(a) Feedback:		
All stakeholders are involved	-----	-----
Open communication and discussion	-----	-----
Common vision established	-----	-----
Strategies clearly defined	-----	-----
(b) Individual:		
Awareness of change process	-----	-----
Staff is willing to change	-----	-----
Attitudes are positive	-----	-----
Teachers involved from the beginning	-----	-----
Teachers empowered	-----	-----
Individuals valued	-----	-----
Flexibility permitted	-----	-----
(c) Technology:		
Accepted by staff	-----	-----
Training instituted	-----	-----
Copying mechanisms established	-----	-----

CHECKLIST 8.13.: EVALUATING CURRICULUM

The following check list of indicators for assessing the component, CURRICULUM, aligns with the framework established in Chapter 8.13.

8.13.1 (1) THE COURSE OF STUDY:	YES	NO
Adequate program offered	-----	-----
Course offerings extensive	-----	-----
Relative to present day society	-----	-----
Relative to needs of students	-----	-----
Inculcates skills necessary to compete	-----	-----
Content all inclusive	-----	-----
Special needs addressed	-----	-----
Learning needs designed	-----	-----
Programs standardized	-----	-----
Quality & Basic skill areas stressed	-----	-----
Critical thinking fostered	-----	-----
Divergent questioning encouraged	-----	-----
Problem-solving emphasized	-----	-----
Technological expertise included	-----	-----
Global awareness fostered	-----	-----
Aligns with objectives	-----	-----
Aligns with instruction	-----	-----
Aligns with evaluation	-----	-----
Hidden values imparted	-----	-----

8.13.2 DEVELOPMENT		
District curriculum committees established	-----	-----
Coordinated among teachers	-----	-----
Leadership evident	-----	-----
Quality assurance mechanisms in place	-----	-----
Long range planning in vogue	-----	-----
Innovation encouraged	-----	-----
Integrated with in-servicing	------	-----
Collaboratively developed	-----	-----
Well planned	-----	-----

8.13.3 IMPLEMENTATION:		
Teacher competence & expertise	-----	-----
Instruction/performance augments content	-----	-----
Time periods realistic	-----	-----
Variety of strategies used	-----	-----
Out-come based evaluation	-----	-----
Cognitive outcomes (e.g.,achievement) satisfactory	-----	-----
Affective outcomes (e.g.,self-esteem) satisfactory	-----	-----
Behavioral outcomes (e.g.,social) satisfactory	-----	-----
Continuous reflection & evaluation	-----	-----
Clinical and peer supervision employed	-----	-----
Cyclically monitored	-----	-----

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