The Learning Circle:
a design of an alternative learning environment for Quebec children

Ann Louise Emanuel

A Thesis

in

The Department

of

Educational Technology

Presented in Partial Fulfilment
of the Requirements for the
Degree of Master of Arts at
Concordia University
Montreal, Quebec, Canada

October, 1995

ISBN 0-612-10851-1

ABSTRACT

The Learning Circle:
the design of an alternative learning environment
for Quebec children

Ann Louise Emanuel

This study is an analysis of Quebec's current public school system, through its beginnings and subsequent development, and of the many alternatives to it that have been proposed and implemented over the history of public schooling in North America. There is a lengthy description of alternatives to the traditional public school classroom as possible models to lead to effective school reform for the beginning of the twenty-first century. This study continues with a design for a learning environment that may enable educators to better meet the needs of elementary level learners and the communities from which they come. This thesis concludes with reactions to the design from a panel of informed parents, elementary level teachers and school board trustees.

TABLE OF CONTENTS

LIST OF FIGURES

CHAPTER ONE

Introduction

Learning is a personal activity and one premised on free choice, genuine interest and curiosity. Our institutions of learning have failed us, and even harmed us, when they have not accounted for the nature of learning and for how children learn.

In fact, it can be argued that much schooling is not about education, but about something else entirely. In school, some children come to hate learning and to hate the institution most focused on them. This can be seen as the system's most horrific failure. Through what goes on in classrooms, students learn order and conformity, praise and censure, power over others and powerlessness in the face of arbitrary authority. There may well be too much valued placed on power over others in our classrooms and not enough cultivation of power from within the individual to achieve personal goals. When the aim of schooling is seen as one of socialization through subordination and conformity, this kind of classroom practice makes some sense. However, through teaching our children subordination to authority and conformity to the status quo, our society cannot easily move beyond its present dilemmas of inequality and inability to solve problems of environmental and social crisis.

The Canadian education system began as a community response to a community's need: the need for literacy and

numeracy in the face of a changing society. However, schools in the early 1880's were woefully inadequate because teachers and administrators did not take into account, indeed they knew little about, the nature of learning and the ways that children learn. To bring the population to full literacy and numeracy they could have used other mechanisms. They could have taught the mothers, grandmothers and grandfathers how to read and cipher in small community schools and then set them the task of teaching the children. However, they did not do this. They institutionalized learning and gave us the phrase "formal learning", which roughly translates as regimented, planned, or extrinsically controlled learning.

Ever since the education system began to emerge from the people's need for literacy and basic skills, there have been alternatives to it. These alternatives have sometimes been mere proposals, sometimes successfully functioning learning environments. Many of these alternatives have attempted with more or less success to take into account the nature of learning and how children learn. However, always they have been created as alternatives to, and even challenges to, the existing system. As it has acquired power through funds and the sheer weight of the numbers of people involved, the government sponsored and approved system has created a paradigm within which all alternatives struggle for legitimacy.

Alternatives challenge the monopolistic character of the public school system. They also allow new and sometimes

radical ideas about how children learn best to be tried and tested. The history of educational alternatives has much to offer to those who would propose reform of the system now.

There is currently a great debate going on in the United States about their schools and school system. In Canada, and in Quebec specifically, there is a constant concern that we could be doing better than we are for our young people and our society, and that we are not keeping pace with seemingly inevitable technological, demographic, social and economic developments. Attempting to deal with these technological developments, changes in our demography and in the labour markets, and changes in the structure of the family and the environment of the home; proposals range across the educational and political spectra, from "back to the way it was in the 1800's", to high tech and high cost solutions, privatization of our school system and everything in between.

When we compare the system and its environment, the society, as they are now to the way they were when the system was largely created, we see a number of huge discrepancies. Yet, the essential elements of the system have not changed. Alternative structures have been proposed, but no alternative has managed to change the fact that education through the public school system is organized by adults and that children's learning is controlled and depersonalized almost from their first day at school. Technologies of communication and information transfer, storage, retrieval and processing offer some hope that learning may become again a personal

activity based on free choice and genuine curiosity. These technologies practically demand of us that we restore to learning its active, self-directed essence.

Educational technology is an area of study and practice concerning all aspects of the organization of educational systems. The includes the design of educational environments. The following is an attempt to synthesize the best ideas from various models of teaching and learning to design an environment worthy of Quebec school children living in today's society. It is an attempt to restore learning to its ideal place as the great human endeavour that all people should participate in from their infancy to their old age. It is a different learning environment than the one that most Quebecers know from their school days because it concerns itself primarily with children's attitudes toward learning and life rather than with test scores and other measures of information recall. The design which follows uses technology as well, in an optimistic attempt to meet our society's need for literate, confident and able learners who can meet the challenges of the twenty-first century.

The name "learning circle" is used in the field of Adult Education to represent a specific design. The Learning Circle model presented here is a new model for elementary school children. All that is shared between the two designs is the name. The following design of a learning environment uses ideas introduced to the school reform debate over many years. It proposes an egalitarian and collaborative environment for

young learners. It also combines learner-directed activity with a common core curriculum. It uses systems thinking to ensure an adaptive environment that seeks and makes best use of feedback from its components and its surroundings. The learning circle could be a viable alternative to the classrooms that most students in Quebec attend today.

CHAPTER TWO

A Statement of the Problem

The Quebec Public School System's Unresponsive Nature

Smith (1973) stated that schools exist to provide the essential skills of language, numbers, and orderly thought, and to transmit in a reasoned pattern the intellectual, moral, and aesthetic heritage of civilized people. Many people today would still agree with that statement. However, while many might agree about the purpose of schooling in a broad sense, those same people might question the methods still used today to achieve such a purpose. Kenneth Sirotnik (1983) found through an extensive survey at elementary and secondary levels that teachers outtalk students by 3:1. Teachers provide little corrective feedback to students. Teachers devote little time to questioning of any sort and almost no time to open questions that call for complex cognitive and emotional responses. Whole class instruction predominates, with almost no independent, small group, or cooperative work by students, and there is little praise, enthusiasm or intensity of any sort.

Smith (1979) describes a traditional educational system. Within it, there is no coherent stated theory of learning underlying everyday decisions and behaviours. Motivation is based on punishment, reward and competition. Behavioural psychology has had a definite influence on the traditional educational system while cognitive psychology has not had a

strong influence. Rote learning and the recall of information are stressed. The hidden curriculum plays a key role in the lives of learners; its message is that learners are dependent, and they are not responsible for their own learning (Gatto, 1991). In general, the teaching process in the traditional educational system has not been guided by a theory of instruction. Teacher talk is the dominant mode of communication, while a few modes of instruction dominate the system; class discussion, recitation and lecture, supervised study and modelling.

Textbooks have been the dominant influence on the traditional curriculum. The textbook provided for each student determines the major portion of the course content. The overall content of the textbooks is determined by the national textbook market and by a few, probably not more than a dozen, major publishers that dominate it. The traditional schools are basically conservative and the curriculum is resistant to change attempts, partly because replacing textbooks is very expensive.

Values in Schools

Schools are still repositories of ideals that the community does not actually practice. A perfect example of this is the "no swearing" rule in the school while students parents use "swear words" quite often. Because of this, children learn cynicism and hypocrisy and teachers are asked to live unauthentic public lives. Our ideas about the culture

and values that schools should transmit are in disarray. Our communities are so pluralistic now that such cultural confusion seems almost inevitable. This is partly why we so often end up concentrating on academic skills (Featherstone, 1976). This also helps to explain the many schools, especially high schools, where a sense of coherent values is lacking.

Changing Elements in the System and a Changing Environment

There are also differences between students now and students in the past. We are much less inclined to respect people in authority today. From our highest leaders to the local police and the classroom teacher, we are much more sceptical of those in authority. For at least 300 years, the school was the major source of information in the society. This is no longer true. That fact alone begs for a transformation of the schooling paradigm. Children and youth spend more time watching television now than they will ever spend in elementary and secondary schools (Smith, 1979).

We live surrounded by change. Even essential elements of the system are changing; students, teachers and educational technology. Why has the average classroom not changed more than it has? Students of organizational behaviour recognize that resistance to change is deeply rooted in individual psychology and group culture (Schein, 1985). We applaud change in principle, but oppose it in practice. Change challenges competence and power, creates confusion and

conflict, and risks the loss of continuity and meaning (Bolman and Deal, 1991). It is precisely to preserve stability that organizations build culture; a set of strongly embedded assumptions, values, and customs. This fundamental conservatism in the culture of institutions shapes their response to demands for change. Because resistance is inevitable, the primary task of managing change is not technical, but motivational and political. The challenge is to build commitment to innovation among those who must implement it (Evans, 1993).

Questioning This System's Foundations

In some ways, school is not about a child's discovery of the world, but about something else entirely. Graubard (1972) believes that the norm of hating school and hating learning is systematically created. The fact that children come to hate formal learning and to hate the institution most focused on them must be addressed. However, in important ways, the school system is not a failure. It serves very important functions for the society: inculcating conformity, reducing diversity and individualism, keeping children and adolescents occupied, and freeing parents to participate fully in the production and consumption that create our economic situation. There are powerful social and economic reasons that help explain the features of the system that are deplored by so many people. Carlson (1992) maintains that school structures are not the result of applied intelligence based on

controlled, scientific experimentation as much as they are the result of applied power in the interests of dominant groups.

An openly stated goal for education is that of socialization and preparation for productive living in the society. Hamilton (1983) discusses these socialization issues. Through the group structure of most school classes, students are constantly confronted with delays in getting the teacher's attention. Students' personal needs for recognition and help are subordinated as they learn order and conformity. They also learn to function within the context of a group, but they could conceivably learn this without also learning subordination. As praise and disapproval are given to students by teachers and their peers, they learn, more or less, to handle the stress of being evaluated publicly and to balance their teacher evaluations and expectations with those of peers.

As well, power is constantly being exercised in classrooms by teachers and through this students encounter and learn about a more impersonal type of power than that seen in the home. This power is more like that which will be encountered in the larger society. However, when we teach children to respond unquestioningly to this impersonal and sometimes arbitrary power, we make much less likely the development of a society where order is based on respect for others and a sense of communal responsibility for the wellbeing of the society itself.

As well, the literature shows that in the United States and in Canada educational socialization serves to differentially socialize and stratify students and occupational statuses. Race, sex and social-class bias in the socialization and educational process in the United States work to the disadvantage of women, low-income students and various ethnic and racial minorities (Thomas, 1988).

Welcome to the Hierarchy

Schools may be considered as part of the government; they are bottom level sub-systems. Their controllers are politicians and administrators. As Henchey and Burgess (1987) explain in their historical analysis of the Quebec school system, there are many of these controllers and all of them have some authority to tell the schools what to do and how to do it. All of them also are under constant pressure from constituencies and interest groups to put that authority to use in controlling schools. As democratic officials, they have strong incentives to respond to these democratic pressures - so they do - and the result is that the schools get buried in policies, rules, regulations and bureaucracy (Chubb and Moe, 1992).

The amount of public policy affecting schools has increased dramatically over the past three decades; schools and school systems have become more complex, organizationally and politically. The chief source of this complexity has been the creation of new teaching and administrative roles and the

growth of organized political interests in the form of teachers' unions and parent associations. These roles and interests have become increasingly institutionalized. They have become a stable, legitimate presence in policy-making. Any fundamental change in school organization reverberates through these institutionalized interest groups, altering their positions relative to one another (Elmore, 1990). This is why negotiation between these groups and recognition of all the voices and all the people involved in the schooling process will be essential to any change in the system.

Attempts to Change the System

Despite the existence of large and influential interest groups in the domain of public education, at the level of the school the available literature consistently reveals that teachers and parents rarely exert significant influence on significant issues (Malen and Ogawa, 1990). Essentially, principals retain control over building-level policies, teachers hold control over instructional practices and parents sometimes provide support. This is true even when certain conditions designed to ensure meaningful parent and teacher influence are met. Teachers can have impressive resources available to them to aid them in their empowerment, but studies have shown that these resources may not be used (Malen and Ogawa, 1990). Parents may have the potential to persuade and pressure but not make use of it. Power cannot be legislatively given; people have to take it.

Thus, management of change requires real leadership - political leadership. At stake are existing power structures and people's levels of influence and ability within the institution. For example, women form the majority of teachers, especially in early childhood and primary education. Most of them are mothers, often of dependent children. In that respect, relations between "professional" mothers and "amateur" mothers have become increasingly complex (David, 1993). In this context, asking for greater parental roles in educational decision making becomes a very difficult political problem. Mothers who are not professional teachers can be devastated by comparisons between their abilities and those of qualified teachers. Teachers who have worked behind closed classroom doors for years can be terrified of parental criticism and interference. This is just one example of the difficulties of initiating change and developing new structures.

There are powerful voices representing forces grappling for position in the struggle to improve education. There are protectors of the system - working to maintain the system largely as it is; the standards movement - seeking competitive advantage over other societies through more discipline and higher standards in schools; the technological movement - seeing hope for the system in recently developed technologies; and the choice movement - said by some (Barlow and Robertson, 1994) to be coupled with an unprecedented corporate and conservative political interest in school systems. These

elements of our society often conflict with each other and even work against each other in their attempts to achieve their goals within and for the school system. Yet, as Carlisle (1993) wisely maintains, each movement has positive features to add to the mix and each movement can help to negotiate for the common good.

Competition in the System - chaos or control

Private schooling in Quebec, especially that provided by the Church, has a long tradition extending over 350 years. During the reforms of the 1960's many private schools disappeared and the influence of the Church declined. However, the importance of the private sector was affirmed at that time by a specific inclusion in educational legislation.

While private schooling in Quebec has been allowed to flourish, there are some people who feel that the private sector is a threat to the continued existence of the public system. There is also the criticism that the private schools are an elitist and divisive element in society (Henchey and Burgess, 1987). Private schools for the elite tend to develop independence, self-confidence and creativity among potential leaders, while public schools train children to follow the rules laid down by the leaders (Simmons, 1983).

Some people do not mind that private schools exist, but question the amount of government funding which they receive - which is surprisingly high in Quebec, up to 80% of operating costs in some schools. It must be remembered that along with

high government funding there is a high level of government control of curriculum in private schools. There is also the criticism, in relation to main-streaming in the public sector, that many school boards simply do not have the financial resources necessary to provide the services required to all students, including learning disabled ones. The public school system is required by law to accept the "responsibility of responding adequately to the educational needs of all Quebec children." It can be argued that private schools will increasingly tend to cater to the talented and wealthy, whereas the public schools, required by law to accept everyone regardless of ability, aptitude or handicap, will become the depository of the rest of the population.

Not surprisingly, dissatisfaction with the quality of education in the public schools has led to many parents enroling their children in the private sector. Private school enrolments have increased and have augmented the already serious decline in public school enrolments in Quebec. The private sector, heavily supported by government subsidies, is seen as a threat by both school boards and teacher unions, and so it is. The private sector challenges the public sector into improving its performance and thus may play a part in ensuring the viability of the public school system.

Alternative schooling within the public sector has been introduced during the last twenty years. Alternative schools are those that offer a specific curricular focus or pedagogical approach that meets the needs of a specific

clientele. They are almost directly comparable to private schools. They can be found in both the Catholic and Protestant sectors in Quebec and at both elementary and secondary levels. Many cater to specific populations, such as high school drop-outs or "at risk" adolescents. At the elementary level, most of the alternative schools are within the French sector and follow the principles of open education.

The development of alternative schools questions the very nature of public schooling. Does this create two broad classes of schools; selective on the one hand, and community based on the other? Will public schools start to compete with each other for clientele? What are the implications for an open and accessible education system and what does this imply for the philosophy of public education? On the other hand, the success and popularity of the alternative schools show that the public sector can respond effectively to the needs of the population, can perhaps do so as well as the private sector.

The world in general, and Canada in particular, is experiencing a powerful trend toward multiculturalism. The priority of society is giving way to the priorities of the group and the individual (Holmes, 1991). Given current realities and trends, it seems reasonable to assume that there will be continued and probably improved provision for independent school funding in accordance with principles of accessibility and satisfactory instruction. Most public schools in urban and suburban areas already face competition -

from Roman Catholic schools, from French immersion programs, from private schools, from special programs, and from open enrolment policies. Given the reality of competition in the system; how can we ensure the benefit to all Quebecers of a system of diverse learning environments?

The Question of the System's Goals

The focus in general in education has moved from equality of opportunity; with all aspects of the classroom experience being uniform regardless of class, race or gender of the children; to effective schooling through a variety of methods and approaches (David, 1993). The emphasis is on preparing young people for inclusion in an increasingly complex and fast paced society. Effective schooling seems the answer. However, Featherstone (1976) identifies two assumptions about formal schooling that need to be questioned. One is that more and more schooling is needed because society is becoming more and more complex. This is not necessarily the case. The second assumption is that more education automatically increases opportunities and enhances the personal development of the young. If the second assumption is not true, and there is evidence - to be discussed here - in the system and in the system's failures that it is not, then the first assumption is probably not true either.

As well, there are assumptions being made about the job market today and about the needs of our society which can, and should, be questioned. Carlisle (1993) argues that American

employers cannot hire enough qualified workers, so skilled work is being abandoned or exported. It is also said that American business is being forced to spend immense sums on remedial training. Figures on illiteracy are disturbingly large. Perhaps 25 million adults in the United States, and a smaller proportion of Canada's population, are functionally illiterate, and as many as 25 million more need to update their skills and knowledge (Carlisle, 1993).

However, Levin (1984) warns us to avoid two fallacies reflected in the kind of argument offered by Carlisle. The first assumes that the fastest growing job categories, percentage wise, are in high technology industries. The top occupations in terms of fastest growing are fast food workers, guards and doorkeepers, kitchen helpers and janitors. The second fallacy is that technology industries offer jobs that require advanced education and highly complex job skills. The available evidence suggests just the opposite. Other than a small layer of specialists in systems work, computers for the most part generate a huge supply of low-paying unskilled jobs, often occupied by temporary female labour (Kahane and Oram, 1989).

American industry has promoted the rationalization and de-skilling of labour throughout this century in an effort to reduce labour costs and increase centralized control over production; and this continues to be its guiding purpose in introducing technological changes. Industry has created far more semi-skilled jobs over the past few decades than it has

professional-managerial jobs, and it is semi-skilled workers who are in greatest demand in the job market (Carlson, 1992). When we talk about the environment surrounding our education system, the economy that high school graduates will be faced with, we need to be aware of these conflicting claims about the job market.

Indeed, in Canada, Barlow and Robertson (1994) seek to increase the public's awareness of very similar conflicting claims. Their reading of a 1989 Statistics Canada survey of literacy skills leads them to claim that only 7% of Canadians aged twenty-five to thirty-four, and only 6% of those aged sixteen to twenty-four have limited reading skills. They question the existence of a literacy problem in Canada at all. They also cite evidence to show that business leaders in Canada perpetuate the belief that our high school graduates lack skills needed to get jobs, while the reality of the situation is that the majority of jobs are being deskilled and that there really is no skills shortage. Thoughtful Canadians and Americans may question the news, produced by media conglomerates and corporate leaders, that tells them that unemployment and other social problems are their own fault and that they must become ever better schooled in the ways of business and technology if they, and their society, are to prosper.

The Actual Purpose of Schooling

There are three possible views of the objectives of education: to please parents, to serve society, or to maximize children's abilities. Many would argue that public education should serve society. Advocates of a choice system as an alternative to the present system seem to favour education to please parents. Those involved in a child-centered approach see education as a way to maximize children's abilities. When we maximize children's abilities, it can be argued, we please most parents and serve our society quite adequately.

Willie and Miller (1988) believe that the series of reports on educational reform produced in the United States in the 1980's reveal the continuing absence of a common opinion about what is basic and essential in education. A debate about this issue is also going on in Canadian educational journals (Dobbin, 1994 and Lawton and Tzalalis, 1994). Willie and Miller postulate that a consensus on the essential components of a comprehensive education has eluded us because we have not, as a society, come to a common understanding about the purpose of education. One of the things that we can ask ourselves is; what kind of society do we wish to create for ourselves and future generations?

However, even having achieved a sense of purpose by answering that question, Sarason (1991) reminds us that essentially schooling should recognize, capitalize on and exploit the obvious fact that children begin school with the major psychological attributes that are essential to

productive learning. They are thinkers and doers before they come to school. They are eager to integrate new worlds into their existing one and motivation is not a problem. What is at stake as a consequence of the experience of schooling that children go through is this motivation, enthusiasm and eagerness to be thinkers and doers in their adult years as well.

What is at stake, in effect, is the kind of society we will live in when these children are adults. Sarason (1991) asks whether we should not judge whatever we do for children in our schools by the criterion of how we are fostering the desire to continue to learn about self, others and the world, to live in the world of ideas and possibilities, and to see the life span as an endless intellectual and personal quest for knowledge and meaning.

When the education process and the system dedicated to it have as a goal the maximization of children's abilities and levels of self-actualizing personal power, the society as a whole can benefit. When the goal is seen as one of socialization through subordination to societal norms and conformity to peers and authority figures, the society cannot easily move beyond its present dilemmas of inequality, and inability to solve problems of environmental and social crisis. We have to become better than we are now, to transcend the difficulties that face us as a society, as a world and as a race.

Mitchell (1990) defines education as both a responsibility of the individual and of society and argues that this responsibility concerns the intentional development and monitoring of each person's learning how the world functions, how to get along in it and how to contribute to the wellbeing of oneself and everyone else. It is this last contribution to wellbeing that demands more than simple conformity.

Twenty years ago, Cremin (1973) was arguing that the environment of the school system had changed. He called for an educational movement that combined the humane aspirations and social awareness of the progressive education movement with a more realistic understanding of the system's environment. Cremin argued that youngsters are being taught by many curricula. Consider that every publication in every medium has its curriculum! Second, looking beyond the school, we are all taught by radio, television, peer groups and advertising agencies, libraries and museums; a whole city can be seen as a learning environment. Finally, he asked us to focus on the learner herself. The needs of learners have changed, through the changes that have taken place in the environment surrounding them, the society. Once educators take seriously the fact that we are living through a revolution in which opportunities for education and miseducation are burgeoning throughout the society, they will give far more attention to equipping each youngster to make her way purposefully and intelligently through the various

configurations of education and the media, with a view to the kind of person she would like to become (Cremin, 1973). Brent Cameron (1994) defines intelligence as the ability to make choices. His model of schooling encourages the development in children of the ability to make choices that are good for them.

In an age of information overload and unprecedented environmental crisis, we can ask ourselves how educators are fostering the desire to continue to learn about self, others and the world. We need citizens who question and who think critically about their environment and situations. We need much more than basic skills and easy conformity if we wish to improve our society.

The tension between the forces pushing for socialization and conformity and the forces encouraging individualism and diversity can be viewed from a macro-systemic viewpoint. Historically, conformity issues have been in the forefront when there was increased immigration and/or when there have been national emergencies like war, depression or recession, as well as when there have been threats to personal freedom like McCarthyism. Trends toward encouraging individualism seem to occur more during periods of economic affluence and political stability. Regardless of the current climate and emphasis in our schools, the dominant educational paradigm historically has been socialization for life and work. However, there are ways to strengthen opportunities for individual enhancement, no matter the meta-systemic context.

These include; helping individuals to increase self-awareness, helping individuals learn how to learn, helping individuals develop self confidence, and recognizing and respecting human differences (Lynch and Chickering, 1988).

To encourage people to become self-reliant learners and critical thinkers, the educator must work for the autonomy of the student, the school for the autonomy of the educator, the school board for the autonomy of the school, and the state for the autonomy of the school board. Everyone should be working for the autonomy of those below them in the hierarchy (Clark, 1987). This is not now being done. Students learn dependence on authority in many schools. Gatto (1991) argues from his experience as a teacher for many years that that is what they learn above and beyond anything else.

As well, an examination of purpose should focus not on the nation as if it had a single norm, but on the various population groups and their multiplicity of norms. There are at least two sets of norms; those of dominant people and those of subdominant people. Both the goal of individual enhancement, often the goal of the subdominant group, and the goal of socialization and preparation for life and work are important and essential. They complement each other (Willie and Miller, 1988).

Institutions oriented toward enhancing individual potential have tried to recognize a wide range of learning as educationally legitimate; Howard Gardner does this with his multiple intelligences model. To the extent that education

responds to these wide-ranging needs, society is enriched by diversity. However, no matter what you do in terms of recognition, when you measure and treat statistically what children do in school, on any dimension of human ability, half of the students in a sample will be below average. There is no way around this. Egalitarians have to realize that people are not equal in ability and that the normal curve reflects this fact. The only way to deal with this in terms of having everyone "succeed" is to expand the number of dimensions along which talent and ability are measured (Lynch and Chickering, 1988). Again we see the desirability of diversity and choice in the system.

The System's Environment and Boundaries

Another problem concerns the interface between the education system and its environment. The boundaries of the system have slowly become more and more ill-defined as the system has grown. The school system concerns itself with the education and development of children. It concerns itself with children's health care through early detection and vaccination programs. It concerns itself with detection of child abuse and poor family situations. It concerns itself with dental care and nutrition through education programs. It concerns itself with recreation and physical education, career preparation and creativity, prevention of delinquency and teen pregnancy. Teachers often consider themselves to be surrogate parents, and for many youngsters who live in one parent

households or abusive households, teachers offer a lot. The question is; Can they deliver? The system's boundaries are determined in part by the myriad demands being made upon it. Its boundaries have to do with its goals. However, that is only part of the picture.

The school system is in competition, as has been discussed. There is competition within the system, between traditional classrooms and alternative classrooms, public schools and private schools. There is also competition between formal schooling as a whole and the many other sources of information and development now available. We have municipal recreation and learning programs. We have so many publications for people of all ages and all interests that there is virtually something for everyone. We have the lure of commercial television and the excellent educational programming of public television. We have story-telling and reading aloud at the municipal library. We have the practice of apprenticeship making a comeback, along with home-schooling as an alternative to formal schooling. We also have easy travel; long considered by its advocates to be one of life's great teachers. We have municipal museums, planetariums, botanical gardens and architectural tours. We have experimental farms. Home-schoolers argue, and they have a valid point, that there is so much on offer out there, much of it free of charge, that there is no reason for eager, energetic kids to be sitting passively in classrooms for just over 180 days a year. The occasional field trip does not

begin to make good use of the learning experiences provided by any Canadian city and hinterland.

Thus, the public school system's boundaries, its relationship with its environment, is problematic. The system is both too big and too small. It is too big with respect to the scope of its goals, the responsibilities that it is willing to take on as parents become more and more dependent on the system to know what to do with their kids. It is too small with respect to the resources available to learners. Its limitation is, in part, its definition of itself as a classroom experience. The boundaries between activities that are labelled educational and those that are not could be pushed back to encompass informal as well as formal learning. Much gets left out of the classroom and much passivity on the part of the learner seems built right into it.

Ivan Illich argued as long ago as 1973 that people, to learn, need access to things, to places, and to processes, to events and to records. They need to see, to touch, to tinker with, and to grasp whatever is there in a meaningful setting and through their own interest. This learning was then, and incredibly still is now, largely denied in institutionalized learning environments - that is, in schools (Illich, 1973). Learning is a personal activity and one based on free choice, genuine interest and curiosity. Our institutions of learning fail us, they lessen our chances of transcending our current crises, when they do not account for the nature of learning and for how children learn.

Summary

When things obviously do not work designers should redefine systems and problems. To do so means that we must discern a meta-system and learn its characteristics and goals. When we begin to think about the interconnectedness of systems and the role of decision makers far removed from the system in focus - politicians, employers, designers of technology and textbook publishers - we can see how the system is regulated and how its equilibrium can be disturbed (Mitchell, 1990).

We can design an educational system that shares with everyone what has recently been decided, discovered, invented, produced or evaluated. The entire society can become a learning society. As well, all of the people in our society can become confident and able thinkers and doers. Only through life-long learning can people work confidently in the environment of constant change and challenge which surrounds us all. Our current school system does not foster a love of learning, and this it should do, above all else.

The design presented here is a model for a small elementary level learning centre that can be implemented in a community. This model can be replicated across the province if this is seen as desirable.

CHAPTER THREE

The History of Our System

The System's Beginnings

The history of our school system is one of slow evolution from the simple provision of instruction in basic skills at the local level to a huge and complex system controlled and mandated by a central authority to meet all of the educational and developmental needs of the roughly six million people of Quebec. The system was not designed, rather it grew more and more complex through its attempts to meet the demands made of it by diverse elements of the society that is its environment. The demands made by children were not, of course, taken into account.

In Canada, the original school house appeared in the first decades of the 1800's. It was a community organized and financed operation. Attendance at the school was not mandatory. Those who wanted to take part in schooling could do so as often as they wished. Parents paid fees to finance the school. Since people were not able to provide much money, the building was usually drafty and of poor quality. The teacher, usually a man, was not necessarily qualified and was definitely not trained in any way to teach. He was paid little and generally stayed for less than one year in the school. The teacher was in fact very likely unskilled, but could read and write (Phillips, 1957). There was no teaching of individuals in the one-room schoolhouse. Since most

teachers lasted no more than a year in any one school, they could not know the children and care about their learning as could the parents of such children. It is noteworthy as well, that the teacher was brought in from outside the community. He could read and write, and little else, but he was an outside expert who could bestow learning on the community. Knowledge and skill thus subtly became defined as things given to us, not as things that we can acquire for ourselves on our own.

Early Schooling Methods

The method used to "teach" the children was not very enlightened or effective. It was primarily an endless cycle of rote memorization and then recitation. There were no classes, books or grades that would indicate a child's level of achievement. Pupils progressed pretty much at their own rate at the work of memorization and recitation. The students might have benefited from individualized instruction if there had been any instruction at all. There was little or no expository teaching and no class activity in terms of questioning and answering questions, or working on projects and reports (Phillips, 1957).

In fact, the stated aim of education in its beginnings in Canada was rote memorization of textbook content and perhaps the ability to apply the memorized rules of arithmetic, grammar and spelling (Phillips, 1957). Some people felt that too much education for the common people was a dangerous

thing. However, this attitude toward education was not universally held. Others felt that a complete education, one going beyond forced memorization of meaningless phrases, was essential to enable all people to participate in a society that called itself democratic, or that aspired to the democratic ideal. It is clear from public education's beginnings that a philosophy of education and a school's mandate are essentially political. Knowledge is empowering, and even more empowering is the realization that knowledge is everywhere around us and is ours for the taking if we know how to do so.

Individuals seeking to change the system were engaged in fighting an uphill battle. The Royal Gazette of Fredericton published in 1830, without editorial approval, a letter which objected to the expenditure of people's money on schools, "where the children are taught the antiquated, obsolete, superstititous (sic) nonsense about fearing God and honouring the King, and submitting to governments, pastors, and masters, and ordering oneself lowly and reverently to one's betters." (MacNaughton, 1947)

Local Control and Central Control

In Quebec, the people of each community were given some control of elementary education and began to elect trustees in 1829. But most people were unprepared for the innovation of electing trustees to a local board. They had some experience of local school administration since it was established in

1824, but it was done in close association with the church. The legislation of 1829 gave no share in the management of schools to the clergy, and the largely rural population of Quebec judged itself to be too ignorant and too inexperienced to carry on without the support of the church. Central authorities were thus loathe to give local boards the opportunity to really take control of local schooling (Phillips, 1957). They have been ever since. The concept of local control over schooling through local school boards is based on the belief that given funding and opportunity, the people can themselves organize and provide education for their children. However, this premise has continuously been questioned.

From the 1840's to the 1870's in eastern Canada were developed the strong central authorities to control elementary schooling that we still work with today. There were four steps in the development of central control over schooling. First there was the establishment of some regular system of grants from the government to the local schools. Second, there was the setting up of boards which were intermediate between the locality and the government. Their role was to examine and license teachers. Third, there was the establishment of a provincial board with wider powers. Finally, there was the employment of a provincial superintendent and additional "expert" personnel. Money was the key to gaining control of schooling (Phillips, 1957). Whoever paid for it, had control over it. Also during this

time, there was a change to local taxation based on property values to allow the operation of "free" schools. This allowed for, and in fact honoured, the ideal of schooling for everyone regardless of their position in society or ability to pay (Phillips, 1957).

Compulsory Schooling

This provision of schooling for everyone in society is one of the most important aspects of our education system. However, we have made a profound shift from offering everyone an education to forcing everyone to attend a government accredited school for just over 180 days a year for eleven to twelve years. Gone then, is the idea of free choice through genuine interest and curiosity. It is replaced by a system based on coercion which takes little account of what learning is and how children learn. Quebec, in the early 1900's, had the highest average daily attendance in relation to pupils enrolled and that was without any attendance legislation. Finally, in 1942, despite the high attendance rates, the Council of Public Instruction in Quebec expressed agreement with the idea of compulsory attendance. Every other province had it and it was supposed that we needed it too. Legislation was enacted immediately to require the attendance of children from six to fourteen years of age in rural areas and from six to sixteen years of age in urban centres (Phillips, 1957).

Private Funding and the Ideal of Public Schooling

The issue of funding and local responsibility was debated almost one hundred years ago, and is currently being debated again. In January of 1900, a school enrichment programme funded by parents was implemented which was very similar to current enrichment programmes in public schools in the Montreal area which are seeking funding from parents, like Royal Vale Alternative School in the PSBGM (The Gazette, Section B, April 17, 1993). By 1902 the Avenue Road Voluntary Public School had thirty pupils. The idea, currently in vogue again, was to have parents pay a voluntary fee to supplement the money spent through the school board. They would supply specially qualified teachers and offer an enriched curriculum. School board administrators and others in the system objected to this on the following grounds: if minority groups are permitted to supplement the standard education given to all in detached little public schools of their own, they will inevitably become pressure groups lobbying for the reduction of school taxes on the grounds that they pay directly for their children's education (Phillips, 1957).

In effect, the essence of public education as a democratic institution is that those who want better schools for their own children must help to provide them for all children in the community. This is a noble principle, yet it is continuously being eroded in fact by private school clients, by those parents who line up to register their children at Royal Vale and comparable schools, and by home-

schoolers. Those who want more than the public education system can offer, or who want something very different from what is on offer in public schools, illustrate one of the problems inherent in this principle: learning is a personal activity based on genuine interest.

The Development of Formal Learning

After 1900, urbanization and industrialization increased and consequently children learned less and less in the home as less and less went on there. Thus subjects and skills such as manual training, household science and nature study were introduced to the curriculum. These course titles represent the institutionalization of learning about the world around us. It can be argued that "classroom nature" study is an oxymoron. No longer were the schools charged with bringing only literacy and numeracy to the population. Things that children had been able to learn on their own in their homes would now be taught by strangers, outside experts, in schools. The home had deeply changed through urbanization and industrialization. The school replaced the home as a source of information about the world. Other subjects to "enrich life and bring refinement to it" were added, such as art and music. After 1925, the changes begun in 1900 were more marked and social studies were added to give further understanding of the world (Phillips, 1957).

This curriculum change marks a profound shift in the role of the family and of the school. Something as seemingly

innocuous as a curricular decision can have a profound impact on the way people perceive the family and the school and on the expectations that they have of these when it is multiplied by the total number of children and parents in the society. The family's role in raising children and teaching them about the world was reduced dramatically, while the school's was augmented. Also, we see again the potential to inculcate students with the message that knowledge is something that one acquires in school.

The Development of Modern Motivational Techniques

In the early 1900's, for the first few decades, the study of psychology had an impact, as it still does, on methodology in education. Before the end of the last century, McLellan wrote, in a book called Applied Psychology, that the learner's interest was essential to learning (Phillips, 1957). Canadian educators influenced by psychology stressed the need to consider the child as a whole person and the advantages of presenting a block of subject matter that the child could grasp as a meaningful whole before going on to study details (Phillips, 1957). As well, in the early decades of this century, there was a revolution in discussions about teaching and learning through the introduction of the concept of motivation. It came to be known that although the fear of punishment and the hope of a reward would drive a person to work hard until the one was avoided or the other was achieved, neither a child nor an adult would work with their will, or

take a real interest in something unless it was done of their own determination and under conditions that were seen by all to be fair (Phillips, 1957).

Never-the-less, most schools continued to use rewards and punishments to get kids to do what was required of them in school. There were only cautious attempts to have children learn by doing things of their own will and at their own rate. These did not come close to the real choice advocated by some, even though people knew that real interest is required for learning to take place. There were units in textbooks, so that students could work on units at their own pace. There were projects and the use of the enterprise method. The Canadian authority on the enterprise method was Donalda Dickie. It was a group project method which was favoured in elementary schools across Canada. The activity was usually centered around fact finding, application of knowledge and skill, cooperative effort and democratic or consensual decision-making, and sometimes evaluation by students of their own achievement (Phillips, 1957). This sounds very much like some current ideas being discussed, yet I remember doing this as a grade four, five or six student. Students then called them projects, not enterprises and they are what I remember most and most warmly about elementary school.

Later Developments

In the mid 1950's there were innovations in the field of education; new curricula - like new math, team teaching,

programmed instruction, television and the language laboratory. The prevalent attitude at that time was that anything new is better. These innovations were undertaken in well-established schools with conventional philosophies (Gross, 1971). They were not based on careful thinking about the nature of learning, the nature of the child or how people learn well.

In the early 1960's, the Quebec education system was deeply transformed by the Quiet Revolution. Most of the reforms of the 1960's were the result of findings reported by a Royal Commission set up to examine the system. The Parent Commission produced a report which had a profound influence on the province's schools. Elsewhere in the world, similar changes were taking place. The recent history of Quebec's school system is similar to those of other states' systems.

The Recent Development of Quebec's School System

The Ministry of Education (MEQ) was created in 1964. It became the official authority for all education in the province. There was, needless to say, a substantial increase in the proportion of the provincial government given to education. Because of this dramatic shift to centralized control over the system, the separation between the Catholic and the Protestant systems, represented by confessional school boards, began to break down. The MEQ acted as a unifying body (Henchey and Burgess, 1987). Ever since the creation of the

MEQ, the school boards have been losing power to either the central ministry or the actual schools themselves.

Because of the Parent Report, the Quebec elementary school of today bears little resemblance to the old stereotyped schools of the 1950's, yet there are aspects of schooling that have stayed with us since the 1800's. At the elementary level, reform was more concerned with processes than with structures. The authors of the Report were inspired by the teachings of modern psychology and by examples that they had seen for themselves in England, Germany and Switzerland. They recommended a six-year, co-educational and activist elementary school. Educational programmes would be child-centred. They would depend on the curiosity of the child, rather than being programme-centred. This vision of the elementary school held by the authors of the Parent Report is based on such developmental psychology principles as follow: that the child is an active being and that the child's capacity and personality develop through active participation (Henchey and Burgess, 1987). Finally, people involved at a high level in our education system began to take into account the nature of the child and the nature of learning.

The Parent Report suggested that more latitude be given to individual teachers in preparing their lesson material, and in choosing teaching methods, evaluation strategies and techniques. Presumably this was suggested because the teachers are closest to the children and know them fairly

well. It must be remembered, however, that the average teacher works with a child for only ten months.

The Parent Report recommended that pedagogical directives, as much as possible, should not be mandatory. In terms of what should be taught, the Report recommended that this should be left up to the teachers and school boards to determine. This kind of reform; liberal, progressive, and humanistic, was widespread in many western countries during the 60's and early 70's and was usually a reaction to the authoritarian and teacher-centred elementary schools that it hoped to replace.

In 1966, the MEQ (Ministere d'Education du Quebec) issued a document called The Cooperative School: comprehensiveness and continuous progress. It served as a commentary and a guide to both educators and parents on the implementation of the recommendations of the Parent Report. In essence, this document suggested a flexible and ongoing regrouping of pupils rather than strict grade levels and continuous progress in individual subjects instead of promotion by grade. The overall effect of all this reform was to free the elementary school from external restrictions and supervision. However, it placed a lot of responsibility for the quality of the education provided at the local level and specifically on the teaching staff at the school (Henchey and Burgess, 1987).

The Swing of the Pendulum

Towards the end of the 1970's, there was more and more public criticism of education and a dizzying swing of the pendulum toward centralized control of objectives and content, more detailed programmes, and more systematic evaluation of learning outcomes. In other words, there was a reaction against the allowances of the Parent era in Quebec education; it was felt that there was just too much freedom at the level of the individual teacher in a local school. Included in the proposal to reform the school system (the Green Paper), offered for public consideration, were the following propositions for the elementary level schools: specified learning objectives for each subject; uniform content and time allotment for all schools in Quebec; more detailed programmes; more emphasis on language and writing skills; more homework and more emphasis on the evaluation of learning outcomes. The extent of the shift from child centred programming to state mandated curricula was great. It seems that until now there has been no middle ground in Quebec's elementary schools.

The general approach of the Green Paper was for far more centralization and uniformity in terms of curriculum and teaching methods. However, it suggested greater decentralization in terms of administration and school organization. It also suggested greater parent involvement. It thus represented a very interesting mix of centralized control over curriculum and decentralized, local control over a specific school's aims and priorities. It was an

opportunity for Quebec to try something new, but it was wrapped up in linguistic nationalism and another assault on the already weakened school boards. The school boards fought it tooth and nail.

Overall, in few areas of the proposed reform policy was consensus reached. Criticism was made against the paradox of promoting administrative decentralization through an individualized educational project for each school, while also imposing a more uniform and centralized programme of studies on all schools. It was also seen as illogical to focus the school on the individual creativity of the child, which had been the main focus of The Cooperative School, while simultaneously introducing a strict and uniform curriculum that all students would be obliged to follow.

In spite of all the controversy, in February of 1979, the MEQ published another document titled, The Schools of Quebec: policy statement and plan of action. It outlined the policies that the government would then follow based on the Green Paper consultations. It dealt with two separate areas of the school system; the curriculum and pedagogical matters, and school management, parent participation and decentralization. The changes heralded by this document lead to a school system very different from the one advocated in the Parent Report.

Regarding curriculum and pedagogy, the MEQ would develop new courses of study and teaching guides throughout the school curriculum. These would specify minimum learning objectives in all subjects and impose new and more precise criteria for

evaluation. These were called "régimes pédagogiques", or pedagogical rules. These rules govern the working lives of teachers and the classroom activities of students today.

The Quebec System Now

The régime pedagogique for the kindergarten and elementary level is a carefully worded and detailed document that establishes rules for virtually every aspect of the daily operation of the province's elementary schools.

All programmes and courses are prescribed or approved by the MEQ. The courses contain compulsory objectives and optional objectives which can be adapted to meet the priorities of the area. School boards may design special programmes for their needs, but these must first be approved by the Minister. That represents a loss of autonomy and power on the part of the school boards. The school boards and the Ministry are involved in continuous evaluation of programmes.

Every pupil must have at least one textbook for each course and these textbooks and other teaching materials must be approved by the Ministry. Unauthorized textbooks and materials are not permitted. This can be seen as an attack on intellectual freedom for teachers and students. Now knowledge is not restricted only to that which will come to the child through a teacher in a school; it is that which the MEQ designates as fitting and appropriate for youngsters to learn.

Henchey and Burgess (1987, p. 82) sum up the remarkable

shift in attitudes and structures between the Quebec school system of the 1960's and that of the 1980's.

> "Whereas the curriculum reforms stemming from the Parent Report in the 1960's indicated a shift from centralization and control towards a system that was characterized by freedom, individuality and choice, the régimes represent a marked shift in the opposite direction. Freedom was replaced by control, individuality was replaced by the need for equality, and choice was replaced by restriction, all undertaken in the name of improving the quality of education."

People who have never met a child dictate to that child what he or she will learn, and they do this for every child in Quebec unless parents opt for home-schooling. It is not a question as to whether the curricula are "good" or not. Much of what has been done in terms of curricular development is admirable. The point here is that people learn when they are interested in something and this interest cannot be mandated by a provincial government. When the attempt is made to do so, a child's love of learning may well decline as the child comes to associate learning with that which seems irrelevant to her.

The MEQ also directs school boards to provide students with a large list of services; psychological, pastoral, health and social services as needed by individual students. Apart from all of that, they have to provide students with "auxiliary services", which develop students' self-reliance, provide appropriate supervision in school at all times, and encourage them to participate in student activities. They also have to provide special services to learning disabled students and those from economically disadvantaged areas.

That is a tall order for school boards, and ultimately for schools, since schools are the points of actual service. A lot of these services could be provided by the family, or by other institutions; a CLSC for health care, for example. A lot of demands have been placed on the education system, while the community, the family and the home are disengaged. It used to be that father knew best, but now it seems that the people at the MEQ know best and entitle teachers to pass it all on to Quebec's school children.

Parental Involvement in Quebec Schooling

Parents in Quebec have been serving on school committees and participating in parent-teacher associations for years, although until the Quiet Revolution the Protestant sector was the one which saw most parent involvement. In 1966, the Royal Commission report recommended a major change in school board structures which would have made parents a key element at the level of both the school and the school board, but these recommendations were not implemented. In 1979, however, Bill 27 and Bill 71 established a legal framework for the participation of parents within the system at both the level of the school and that of the school board. These arrangements for parent participation in Quebec remain as established in 1979.

Regarding school management, parent participation and decentralization, the legislation of 1979 provided parents with a lot of power should they choose to use it. Parents

would be permitted direct representation on school boards. Principals would have to consult parents on matters relating to school objectives and procedures. Orientation committees; composed of parents, teachers, the school principal and others; would be permitted to develop a distinctive educational project for each school. This can be thought of as a school's overall aim and orientation as defined by its community.

Decentralization within Centralized Control

Bill 71 of 1979 provided for parents to participate in the process of defining a local school as a community school. By defining it as a community school and giving it the mandate of an educational project, they could have it withdrawn to a large extent from the control and supervision of the local school board. An example of this process in the real world is Royal Vale Alternative in Montreal, the school already discussed as a fee charging public school. In theory, the parents could be very involved in determining the specific orientation or ethos of the school through the creation of an orientation committee. The orientation committee brought together all the principal agents involved in the daily operation of the school, except the children. Bill 71 specified that the school board was obligated to establish an orientation committee when requested to do so jointly by the school principal, a teacher and a parent. There is a list of

what the orientation committee could do that is quite wonderful. They could:

-determine the specific orientation(s) of the school

-participate in the preparation of the school's educational project (aims and priorities), follow the work of the project, evaluate the finished project and report on it

-make by-laws respecting the conduct of the students of the school

-make by-laws for the use of school premises

-make recommendations to the school board on the introduction of new curricula (meaningless now with the MEQ control of curriculum)

-make recommendations to the school board on the implementation of school daycare services

-prepare and submit a budget to the school board for approval and see to its administration

That list represents substantial power in the creation and maintenance of a school, in terms of what goes on there and why. The law sought to have the orientation committees take on a number of the responsibilities formerly held by the school board.

The educational project was first discussed in the Green Paper of 1977, and was then confirmed in 1979. The proposal was that each school develop an educational project. This has yet to happen; not every school has one. The aim of this proposal was to enable each school to become more autonomous and individual in character or philosophy. The aim overall

was to decentralize the administration of the school system to the level of individual schools.

It seems that the people who came up with this idea wanted those directly involved in the educational process to come up with their own set of objectives. By answering the questions, "What are we trying to accomplish here?" and "What are our priorities and interests?" an educational project would be defined. As well, the people involved would then be clear in their own minds about why they were working in that school building and what they were working towards.

Henchey and Burgess (1987) and Milner (1986) agree that teachers, parents and the wider community served by the school can be linked together by the educational project. It should reflect the character, needs, and priorities of the various members of the community it serves. The implication is that individual schools should reflect the diversity of their communities and that each school should develop its own character, style, dominant values and/or orientation. This could be reflected in such things as the religious or moral character of the school, and the kind of conduct that is promoted among members of the school community. Further, the educational project can serve as a guide to choices made within the general framework set out in the law - the regimes pedagogiques. The legislator's duty is to establish basic standards; the educational project fills in and enriches that basis (Milner, 1986).

A plan drawn up in 1981 by Camille Laurin in the form of a White Paper, after the establishment of the educational project for individual schools and the regimes pedagogiques, was unexpectedly radical in its decentralizing tendencies. However, it was not implemented as designed. The Quebec School: a responsible force in the community, aimed at replacing a system based on confessional school boards with one based on local school councils on which parents would be dominant. Significant power would shift from the boards and the teachers' unions to the parents and teachers in the schools (Milner, 1986).

Chapter two of the White Paper of 1981 surveys the problems in Quebec education and suggests that the fundamental problem is the minor influence of parents and local communities on the orientation and life of the institution educating their children (Milner, 1986). There is an attempt made here to address the disengagement of the family and the community from the upbringing of their children, an attempt to deinstitutionalize, to some extent, children's upbringing.

Chapter three sets out the major objective of the reform; "to redefine the schools, to give them responsibility for their own educational projects, to make them the focus of our educational system, and to put them back into the hands of those who use and run them." (Ministere de l'Education, 1982, p 37) The school was to become a corporate entity under the authority of the school council. The school council would elaborate the school's curricular and extracurricular

objectives in the form of an educational project, but this would be under the mandatory guidelines and objectives of the pedagogical rules laid out in detail by the Ministry. The school council would select the principal, deploy staff, and recruit students based on the objectives of their educational project. That is considerable power, even under the pedagogical rules. Parents would be able to choose among the schools of their area according to the educational priorities that they set for their children (Milner, 1986). This would have allowed real choice for parents, if not for their children.

Quebec has come close to the development of a unique system combining centralized and complete control over curriculum and assessment with decentralization in terms of individual schools' operations and orientations. A system of choice already operates to some extent in Quebec, particularly in the greater Montreal area where about half of the province's people live. Laurin's proposal would have formalized the existence of choice within the system.

Milner (1986) contends that the debate over the White Paper came to rest on the assumption that parents are willing to put considerable time and energy into their children's education through the schools. One parent who served on a school council told me that meetings often lasted until midnight! An institution with no real power, the school, was suddenly placed at the center of the entire system, which one could argue is where it should have been all along. This

assumption was challenged by the school boards, who had much to lose had the changes taken effect. Few orientation committees have been established (Milner, 1986 and Henchey and Burgess, 1987) although more and more are coming into being. Some of the recommendations of the White Paper have been put into effect through Bill 3; witness Royal Vale and other schools with powerful school councils. The concern is that institutional structures significantly affecting people's lives should encourage rather than inhibit people in asserting control over those structures. Institutions need to be cast on a human scale so that the people whose needs they serve are able to take responsibility for articulating those needs and identifying the means for satisfying them. This is perhaps what the original Laurin plan sought to achieve.

A Paternalistic System

Slowly over the course of our school system's development, the aims, curricula, methods and disciplinary policies showed evidence of a growing confidence in people's ability to make decisions for themselves and in children's abilities to learn actively and through their own motivation. This tendency continues today, especially in debates about decentralization and control of curricula, so that we can see ourselves acting in an historical context which moves slowly from paternalism to humanism. However, we have not gone far enough and our students are often disengaged by the elementary schooling experience. It is not enough to seek the

involvement of parents on school councils. We must stop hindering children in their attempts to do that which they naturally do very well; learn. Throughout the history of our system, there has been a parallel history - the history of opposition to the system and proposed alternatives to it. This history has as much to teach us about what our system needs now as does the other.

CHAPTER FOUR

The History of Reform Movements before 1980

Europe's New Education

There have been criticisms of the public school system and challenges to its hegemony almost since it became firmly established as an institution of our society. The oldest worry about schooling has been that it emphasizes rote learning, mere exercises in memory, and fails to encourage creativity, thinking or imagination in solving problems of all types. The New Education of England, Germany and France started from that premise and built alternatives. In the late 1800's and into the early years of this century on both sides of the Atlantic - progressive education parallels new education - there was a reaction against passivity in classrooms, against rote learning and the sacrifice of individuality, and against an absence of attention to the child's spirit, imagination and feelings (Beck, 1987).

The New Education's students were treated as family members taking major responsibility and even helping in the support of the school through gardening. The idea of a community of work was popular in the Free School Communities in Germany, which were based on the model of the English rural New Schools. The main idea of these schools in both countries was that the management of the school was to be cooperative. A. S. Neill was just one of many members of the New School

movement to create a cooperative, egalitarian community of children and adults. The director of the school and the teachers joined with the students in responsibility for the management, discipline included (Beck, 1987).

These Free School Communities, despite the name, provided structure to school life, including the curriculum. In terms of teaching and learning, there was no fixed time table and children worked at the topics of their choice in small guided groups. We see here the allowance of self motivation through curiosity and interest. There is no record of a criticism that any of the new schools had low academic standards. Children under the age of ten were given instruction in reading, writing, drawing, stories, biology and arithmetic. This instruction was integrated and organized around centres of interest, or themes. This sort of theme work has been done in many settings since then (Beck, 1987). Adolph Ferriere of Switzerland is considered to be a founder of the movement in Europe. He defines a new school as a "self-governing country boarding school in which all education is based on personal interest and experience, and intellectual work is combined with manual activities in workshop and field..." (Boyd and Rawson, 1965, p 16) What is interesting in this definition is the importance of personal interest. Curriculum can be broadly defined by others, but education emanates from personal interest and experience. Ferriere describes the Activity School as a place of spontaneous, personal and productive activity (Ferriere, 1928). It seems that

throughout the century, people offered such learning environments, but always as an alternative to the standard classroom environment of coercion and consequent learner passivity.

The years between the wars were the best experienced by the New Education. A. S. Neill's Summerhill was founded in 1924. There were quite a number of these English country boarding schools and variation among them was very great in the 1920's and 30's. Any number of social ideals were represented. However, many of the movement's experimental schools were private and therefore expensive and totally class bound (Beck, 1987).

The American Progressives

The activity school was psychologically and philosophically close to what John Dewey and the progressives were writing about and creating, in part, in the U.S.A. Its values were those of educational reformers from past centuries, Rousseau, Pestalozzi, Herbart and Froebel, but it was made modern by using the findings of child psychology. It failed, however, to continuously and consciously update its methods and values based on new psychological findings (Beck, 1987). This inability to adapt to new situations and new understanding was a fatal flaw.

It was also a weakness of the free school movement that the protests and criticisms of the early free school movement in the United States did not pick up where the New Education

movement had left off such a short time before. Free schoolers and radical reformers of the new era did not learn from the accomplishments and mistakes of the Europeans, or their own Progressives. Instead, they read A.S. Neill's Summerhill in isolation and tried to recreate a forty year old, British vision of free schooling without adaptation, or further reflection and reading. What is most striking in any comparison between the two movements, the former and the latter, is the atheoretical, ahistorical character of the free school movement (Cremin, 1973). Potter (1972) asserts that a major problem with many free schools was the lack of a particular philosophy behind the establishment of the school. The later movement was far less willing to look to history for ideas.

Progressive education as a movement began around 1890, peaked in the 1920's and 30's, and then collapsed in the years after World War II. The Progressive Education Association met its demise in 1955 (Beck, 1987). The movement was not an isolated phenomenon in American life, but rather the educational side of a broader progressive movement in American politics and social thought. The movement began in protest against the narrowness, the formalism and the inequities of the late nineteenth century public schools. We have to imagine these based on what we know about the history of our school system in order to understand what the Progressives were attempting. As the movement shifted from protest to reform, it saw the school as a means of continuing social

improvement, as an instrument of individual self-realization, and as an institution for facilitating the adjustment of human beings to a society undergoing rapid transformation (Cremin, 1973). What is interesting here is the definition of the school as an instrument of individual self-realization. Schools are societal structures designed to shape youngsters to society's mold. Schools function within the society and mirror it. They do not cater to individual visions of self-realization. For the Progressives, the school could become a door opener; it could enable youngsters from any socio-economic group to realize their goals in life.

Some ideas associated with progressive education follow. Subjects should not be taught in isolation. Planning should be cooperative, with children involved along with everyone else. Learning involves no preconceived goals, but rather a constant reconstruction of the ideas and ideals of students and teachers. Knowledge is active participation. Learning is a theory of inquiry and thus a specific project or inquiry may become the subject of extended investigation (Mayer, 1964). There is a concern with context and the relationship of information to the learner. There is also a concern with control of children's attention. The Progressives held the ideal of self-generated questions leading to self-motivated study and inquiry. They saw that learning is a personal activity based on genuine curiosity. These ideas are repeated in some of the literature of the free school reform movement.

The ideals of the Progressives echo further. Freedom and cooperation govern the progressive school. It was felt that students learn best when they share ideas and experiences; competition leads to anxiety which negates a genuine educational experience. The teacher works with children so that mutual goals are achieved and creative capacities are actualized. Education thus becomes an experience in relatedness. The school becomes a miniature democracy, where the interests of all are safeguarded. The effectiveness of the school is measured not by its ability to transmit knowledge, but by its ability to develop constructive attitudes and motivations so that cooperation and freedom may prevail (Mayer, 1964).

The progressive movement was very diverse. John Dewey was influential throughout the movement and served as the chief articulator of its aspirations. The main influence that Dewey has had so far on Canadian education is the move made in the late 1930's to revise elementary school curriculum content to make it more meaningful to the students (Phillips, 1957). This minor adjustment is a far cry from Dewey's idea of learners' self-directed, purposeful activity and vital contact with the world.

The movement collapsed in the 1950's due to a number of factors; internal factionalism, the erosion of political support, the rise of an articulate opposition associated with post World War II conservatism and an ideological inflexibility that made it unable to contend with its own

success (Cremin, 1973). Again, a reform movement offering an arguably valuable alternative was unable to endure because it had no way of dealing with the inevitable need for adaptation and renewal.

It is worth noting that the conflicts within the progressive movement were very much as the conflicts within the restructuring movement are today; schooling as work and preparation for work opposed to schooling for creativity and intrinsic values, education for homogeneity opposed to education for cultural diversity. There was also the central dichotomy and tension between equality and meritocracy, or a goal of excellence (Featherstone, 1976).

Common Threads

Here, in a description of the progressive school, we have an uncannily accurate description of the British primary school model of open education that became so popular in North America in the 1970's. Many of these insights into learning and the creation of learning environments are also being echoed in the late 1980's and early 1990's. The call for cooperative learning is repeated through the decades. The focus on attitudinal development is kin to the current call for "learning to learn". Also, as with the New School Movement in Europe, we see the democratization of the classroom. Children learn about democracy and group decision making by being part of a democratic institution. They are empowered to set goals and then to work to achieve them on

their own terms. There is an emphasis on attitudinal development and values education rather than on training in skills and acquisition of knowledge.

The Free School Movement

The 1960's brought another educational reform movement to North America's schools and neighbourhoods. The fundamental issue for educational reformers of the 60's and 70's was the implementation of the simple and sensible reformist ideas about schooling which had been around for a good while. It is amazing how the educational arguments of the 60's and 70's echo those of Dewey from over sixty years before (Graubard, 1972).

At least two of the three themes of the progressive movement, child-centered education and social reform through the schools, later emerged fully in the free school movement of the 1960's. The free school movement also remained as school-bound as the progressive education movement of the earlier decades (Cremin, 1973). This was in spite of the writings of Illich and other de-schoolers. These writings remained on the fringe.

Many of the educational critiques of the 1960's were fuelled by the various movements of empowerment; the black movement, the women's movement, and the peace movement (Nemiroff, 1992). The school system was criticized for being a lifeless and authoritarian place. Public schools were characterized as factory-like environments designed for the

systematic processing of students with rigid curricula and criteria for judging the students' success. This critique of the schools is not significantly different from some of the criticisms implicit in the Parent Report discussed earlier in the context of the history of Quebec's school system (Nemiroff, 1992). Nor is this critique very different from some of the criticisms of the system being made today.

Free schools attempted to abolish authority relations between teachers and students - not simply to educate children better, but to create a new sort of human being and a new model of cooperative social life (Duke, 1976). Here we see the attempt to change the society by changing what goes on in schools. The idea was that students should be empowered and allowed to take responsibility for their own curricula and their own learning. As well, it was a prevalent notion that the consequences of schooling should be sought not in academic attainment, but in how students feel (Smith, 1973). Attitudes and awareness were to be developed in schools, rather than specific skills and information; another echo of the Progressive Movement can be heard.

Graubard (1972) describes free schools as places where "children and young people are not oppressed by the arbitrary discipline and total power characteristic of most public schools and where the possibilities for experimenting and searching for new and better ways for children to live and learn can be explored." p.x Unfortunately, new and better ways were often not sought, rather anything that was not what

had previously been done before in schools was good and anything that was schoolish or technologically oriented was not good. In this sense, the free schools were limited by their reactionary character and could not truly progress as Graubard had envisioned.

Graubard differentiates between three levels of reform. There is reform that does not question the society or its need for social control and that seeks to improve existing institutions to better fulfil the schools' functions and role in society. There is a more perceptive reform which proposes to change existing institutions in order to achieve goals which seem to be generally acknowledged in the ideology of the society (liberty, happiness, equality), but which are apparently thwarted by the actual workings of the institutions. This idea is similar to Stafford Beer's description of systems that do not do what people suppose they should do according to stated values, but do a very good job of what they are designed to do in actuality. The third kind of reform, radical school reform, questions the aims of education as an agent of socialization because it questions the society itself. This is the reform that asks a tremendous amount of the school. It asks that the school counter all the other influences of the society on a child; home, television, peers, comic books. It asks that the school do such a good job of inculcating new values and attitudes into its students that they then go out and transform the society so that it is

able to keep pace with the enlightened attitudes taught by the school.

Graubard tried to deal with this issue by asking how the schools could relate to the broad political and social realities of our society. In other words, how can reformers deal with the obstacles to reform that are present in the society? The problems of society are manifested in the schools, but they are not created there alone and they cannot be solved there alone. Graubard saw that the schools could not take on the role of transforming society. He argued that the best and perhaps only education for social change is action to bring about that change (Graubard, 1972). Such action happens outside of the school, although the school can be involved in it.

The Issue of Curriculum

For the reformers of the 60's and 70's, the issue of curriculum was of central importance. John Holt (1970, p. 218) in How Children Fail says,

> "we cannot possibly judge what knowledge will be most needed forty, or twenty, or even ten years from now....Since we can't know what knowledge will be most needed in the future, it is senseless to try to teach it in advance. Instead, we should try to turn out people who love learning so much and learn so well, that they will be able to learn whatever needs to be learned."

Here is the emphasis on attitude that is in part mirrored by today's trend toward focusing on "learning to learn". However, Holt has been criticized for this stance since it can

be seen as a cheap and easy way to get around the dilemma of curriculum control and curriculum development.

Graubard (1972, p. 212) feels that we need a curriculum, even if some part of it is child created. Discussing curriculum, Graubard says, "If we take the individual young person's concerns and interests seriously, then we will observe how much is learned - often unpredictably - in the course of being engaged in the world in an active way." Home-schoolers who are also de-schoolers would agree with this idea of self-determined, spontaneous curriculum.

Curriculum implies the right of some to prescribe what others shall learn. Self-directed learning is a process wherein each person creates her own unique "curriculum". She asks questions and seeks answers to the questions raised by her own unique experience. The will to learn is synonymous with the basic human desire to gain understanding of the world; it is a chance to relate understandingly to the environment. The mistrust of self-directed learning owes more to a fear of anarchic individuality and freedom than to evidence that people only learn under pressure (Truefitt and Newell, 1973).

It is true that even the best curricula, nationally and within schools, however free, are typically designed by teachers for pupils, not by teachers and pupils for each other. However, planning a curriculum, at its best, is identical to pursuing a course of study, and the final curriculum should be no more than the completed pursuit of

that course of study. When teachers take charge of the planning, they effectively demand that the pupils pursue their course of studies rather than the pupils' own. One solution is to define curriculum planning as a collaborative enterprise between teacher and pupil. In this process of curriculum development - development of questions to be answered and learning outcomes to be attained, neither teacher nor pupil has primacy over the other. Their roles are interchangeable. Schooling then becomes a collaborative exercise in learning, or more fundamentally, a collaborative pursuit of knowledge and truth (Armstrong, 1973).

What is important to remember when discussing the development of a curriculum is that enforced instruction deadens for most people the will for and love of learning. Learning is a personal activity, based on genuine curiosity and desire to understand.

Illich (1973) argues that knowledge treated as a commodity, delivered in packages, and accepted as private property once it is acquired, will always seem scarce. We have to remind ourselves that most people acquire skills and knowledge when they do whatever they enjoy; most people are curious and want to give meaning to whatever they come in contact with (Illich, 1973).

Graubard (1972, p. 244) explains that, "There is a natural tendency to ignore the question of curriculum because we are so conflicted about what is worthwhile, in a human sense, not primarily because we aren't sure what will be

useful." Good questions to ask when developing a curriculum with students are: What kind of world do you want to live in? What do you need to know? What are you good at and want to work at to build that world? So again, schooling is seen by the radical school reformers as action to change the world. It must be remembered that this is not the definition of schooling espoused by the traditional public school system. Their definition of schooling is training to fit into the world as it is.

The Principles of the Radical Reformers

The basic platform of the radical reformers of the 1960's and early 1970's goes something like this; teaching and learning should start and stay with students' real concerns, standard classroom practice should be abolished including; silence, tests, grades, lesson plans, hierarchical supervision, homework and compulsory attendance; also most existing textbooks should be thrown out, schools should be much smaller and more responsive to the diverse educational needs of parents and children, legal requirements which impede the formation of new schools by independent groups of parents should be abolished, and finally, the schools' monopoly on formal education should be broken (Gross, 1971).

We see here a combination of child centred ideology and reaction against schooling as it has been. Many of the ideas listed above are worthwhile in their own right. Most teachers would agree that teaching should address students' real

concerns, except where a much needed basic skill or a crucial value is at stake. An example of this is the issue of violence in our society. Students today are very concerned with violence. It is what they want to talk about, write about, describe and enact. The children that I know tell me that it is what they know best because they see so much of it on television. My deep concern as a teacher is instilling in these children the sense that violence is a negative and destructive force in our society. Schooling cannot always blindly cater to students' concerns and interests.

The Problem of Authority and Discipline

The free school movement had a terrible time dealing with the issue of authority and the role of the teacher. Some radicals even felt that adults had nothing of value to offer to children. The British open school model gave a more realistic role to the teacher than that of passive observer or mere participant. They sought to have teaching practice reflect the incredible diversity of children and treat them as individuals. For this reason alone, informal schedules, physical arrangements, groupings and instruction were seen to be preferable. The ordinary relationships among children and between adults and children were considered of supreme importance. Much learning in an open classroom would receive direction and take shape in the course of ordinary conversation. The legitimate authority of the teacher was

seen as that of an adult responsible for developing a nurturing environment for children (Featherstone, 1976).

Attempts to Break the School Systems' Monopoly

The most important point made in the list of changes required by the radical reformers is the point about schools' monopoly on schooling - on teaching and learning. The points listed above about allowing parents to set up alternative learning environments, about compulsory attendance, and about textbooks all reflect a concern with this monopolistic tendency of the public school system. Parents, or teachers, or both together could set up alternatives to the existing public schools if they received comparable funding. Their alternative may well challenge the nearest public school through offering competition, but perhaps this is what the public school system has needed all along; real competition to force it to address the real needs of parents and children; its clientele.

Textbooks are here named as part of this monopolistic aspect of schooling because the use of certain titles and purchase from certain publishers is dictated by the state. The information contained within them is often biased or out of date. Teachers have no choice about what books they can use in the classroom, at least in Quebec. This lack of choice is what is called into question here.

Learning Outside of Schools

Home-schoolers now, as radical reformers previously, fight compulsory attendance in a school. Luckily for them, many school board officials are sympathetic to their views. Many parents do not question the idea that school comes before all else. The only valid excuses for not attending school are illness or a death or tragedy in the family. However, parents engaged in home based learning, or home-schooling as it is commonly known, do question the value of attendance in a school. I have watched a home-schooled boy helping his father with the labour intensive process of turning the maple sap into maple syrup in late March. The boy was handling a good deal of responsibility and learning about distillation at the same time. Experiences offered through a parent or other significant adult outside of school can rival what the schools have to offer. Compulsory attendance works against serendipity in a child's life.

A community is a facilitative context for teaching and learning. Students, such that they feel themselves to be part of a community of learners, are extremely helpful to one another. Bruner (1971) called for the establishment of a "learning community" beyond the narrow definition of a formal school. He called for everyone to become a learner and a teacher. As a curriculum project, he called for finding a means whereby we could bring society back to its sense of values and priorities in life. To do this we might well concern ourselves with putting knowledge, wherever we find it

and in whatever form we find it, to work to solve some of the problems facing our communities. Bruner reaffirms the importance of values in education yet again. For so many of those offering alternatives or suggesting reforms, attitudinal outcomes are as important or even more important than knowledge and skill oriented learning outcomes.

The Open Classroom Model

The model of the open classroom at the elementary level came to North America from Britain and was very popular in the 1970's. The lesson of open classrooms in British schools was that theory can be of practical use only when it has a living relationship with teachers and children. British primary schools evolved from basic theories of young children's development, but the best educational practice went beyond the best current theory. Good open classroom teachers started with the lives of children then and there and proceeded from the children's experiences toward more disciplined inquiry (Featherstone, 1976). However, the open classroom in North America was a poor imitation of the British model. It was imitated superficially, but often not philosophically or in the attitudes and behaviours of the teachers.

Assessment of Alternative Learning Models

There is generally no significant difference shown between formal and informal schooling in terms of mastery of conventional subjects. "Progressive" students tend to show up

better than formally taught children in those characteristics that "progressive" schools value; initiative, critical thinking, ability to express oneself in writing, capacity to pursue a task on one's own and so on. The research is a morass, but from it we know that there is no evidence that reducing the amount of formal control over students significantly impairs the acquisition of conventional academic skills. However, it is plainly impossible to make inflated claims for informal teaching in terms of conventional test scores (Featherstone, 1976 and Swidler, 1979). What replaces academic effort in alternative classrooms is social interaction, and what replaces academic learning is the learning of group skills (Swidler, 1979). The importance of such interpersonal skills is becoming more and more clear in any case.

Effects of the Reform Movements on the Larger System

The critical ideas expressed by writers popular in the late 1960's and early 1970's surfaced in many educational institutions in many Western countries. In response to those critiques, numerous official commissions were formed to evaluate educational systems. Their conclusions, however, did not usually result in systemic change, in changes of institutions or in the creation of new institutions. Most educational critics were concerned with presenting a philosophy of education in which growth, not just the acquisition of facts, was an important factor; acknowledging

also that growth is a holistic phenomenon involving personal, intellectual, spiritual and social factors. They were interested in making school an integral and relevant part of society, as was Dewey. They were interested in breaking down the social barriers between students and teachers. They advocated empowering students and giving them greater freedom, with the purpose of making them more responsible citizens in a freer society. They saw education as a facilitative force in improving society (Nemiroff, 1992).

A statement quoted by Hillis (1973) and made by the editors of This Magazine is About Schools conceded that, "If there's anything we've learned over the last six years, it's that there is no alternative to the public schools, and that all our energies must go into changing that system." Some conclusions can be made about the role of public alternative schools. They provided options to thousands of students and continue to do so. Their presence has been the impetus for many reforms in traditional schools and classrooms. On some indicators they seem to outperform traditional schools. The alternative school movement in general has had an effect on state legislation and educational policy (Deal and Nolan, 1978). The effect has just not been as dramatic or systemic as some would have hoped. The tolerance of diversity and the growing notion among teachers and parents that there is no one right pedagogy for all is one important after-effect of the recent classroom reforms in many places (Featherstone, 1976).

Large scale efforts at reform in the free school era failed, however, to produce large-scale changes partly because it is so difficult to make a dent in the public school system. It bends, absorbs, and springs back to its original form. Many of the reformers either avoided the public school system altogether or attacked the problem from the top down (Foster, 1977). As well, many of the radical analyses and blueprints for change were only partially and superficially adopted in schools in an unenthusiastic spirit of reform that frequently undermined the purpose of these changes (Nemiroff, 1992). Even modest reforms threatened some educators. Teachers trained in reformist attitudes and strategies would not be allowed to try out the new techniques they had learned. The schools prevented them from making changes (Foster, 1977).

Thus the reforms of the late 1960's and early 1970's had little lasting impact. In fact, conservative elements in the education system could point to some of the more radical and reactionary learning environments of the time as reasons to ignore the reformers altogether. Classrooms remained largely the same. Teachers conducted monologues or more or less forced class discussions, rather than making use of all the new methods and attitudes toward children and learning that had been talked and written about so much (Featherstone, 1976).

The free school movement did not learn from past reform movements or from systems in other countries. It avoided the benefits of technology through its ideology of return to a

more natural, loving and rural world. The movement was self-centred and unrealistic; believing that free schools could change the society, when in fact they seem in hindsight to have made barely a dent in it. The free school movement was not able to work with or to alter the public school system, it remained outside of the system as a fringe alternative and continues to do so even now. Thus, despite all the noise and all the energy that was expended on the free school idea, our schools today are very like what they were in the first half of the 1900's before any of the reforms had been implemented.

In a sense, the free school movement was not truly radical; the problem had to do with the question of what school is for and little to do with how to make instruction more "free" (Postman and Weingartner, 1977). The free school movement was not sufficiently thoughtful, and most significantly it lacked a process for and a commitment to self-criticism and continuous development. However, some of the ideas about learning, about children and about curriculum that surfaced and bubbled during the free school era are worthy. It seems very fitting that they should have resurfaced in the literature of reform of the late 1980's and early 1990's.

CHAPTER FIVE

Current Reform Efforts and Debate

Ideas Versus Political Trends

In exploring the reform efforts and the initiatives which have been debated and implemented over the past ten to fifteen years, a distinction between them becomes apparent. First, there are good ideas, often based on educational research, which seem well worth the effort of implementation by any school system intent on improving its service to the public. Secondly however, there are also political trends in reform proposals and in the debates about them. Schooling is highly politicized since politicians partially control the public school system through ministries of education and school commissions.

In the discussion to follow, political trends in the Canadian debate about public schooling's future will be described as clearly as is possible. All proposals to reform the Quebec public school system must be understood as political statements. No matter how grounded in research findings, or how sensible an idea may seem, it may never see the light of implementation in the public schools because of the political ramifications of its implementation in the public school system.

New Ideas

The reforms of the United States are discussed extensively here because they make an impact in Canada. American trends and developments are often mirrored here. This is not to say that they need be so, just that people look to the United States to find answers for Canada and so reform debates and initiatives there hold a strong influence over Canadian school system debates and initiatives. There are a number of types of reform being discussed in the United States and therefore representing possibilities for Canadians in the 90's. These are identified by Kirst (1990).

One involves improving the existing delivery system; making school delivery systems better, bigger, more standardized, or to run to higher standards. Another seeks greater professionalism on the part of teachers; it involves greater decision-making, peer reviews, and curriculum development by teachers. It is the sort of innovation that Featherstone (1976) called for back in the 1970's.

Another type of reform is called "outcomes based education" and links state payment of schooling to results produced by individual schools, or possibly districts, based on assessments of drop-out levels, achievement, attendance and other indicators of a system's health. Another is an employer driven strategy linking high schools to employers' needs, like the high technology space school already in operation in Montreal. This model of school reform and development also calls for financial and technical support from businesses.

Still another type of reform is based on consumer choice; it allows choice of school by parents (Kirst, 1990).

None of these reform proposals change the essential nature of the schooling process. The politics of the student/teacher relationship remain intact, the idea of a classroom wherein children learn about the world outside remains central to the schooling model. The hierarchy of authority upon which our society is currently based goes unquestioned (Cameron, 1990).

Other ideas about new ways to use school buildings, or to structure schooling are worth mentioning since they demonstrate the value of divergent thinking about our school system. One proposal is that schools be turned into all-day learning centres which can function as daycare centres as well. During the full day, they could offer a full range of remedial and enrichment programs, extracurricular activities and sports programs. Within the building, extra help for learning disabled students could be offered. Volunteer tutoring from parents and others in the neighbourhood, as well as special-interest courses from the same source, could make further good use of the building. Private teachers of music, art, drama and other arts and crafts could use the building as well (Bishop, 1990). By extension of this idea, we can envision the value of keeping school buildings open during the summer. Another proposal which also looks for support and input from a previously under-used resource comes from David Salisbury and the Florida Schoolyear 2000 Initiative (1992).

He proposes that we can and should allow learners to contribute knowledge and skills to system operations through peer tutoring, community service, on-campus work and other services as yet to be determined. Toch (1991) calls for smaller groupings of students and teachers. He argues that the closer ties between students and teachers in small schools result in a level of genuine caring and mutual obligation and that these largely intangible qualities are crucial elements of successful schooling. Small schools are less dependent on bureaucratic governance. There are fewer rules and regulations defining roles and relationships for both teachers and students because there is less need for them. There is greater collegiality among teachers. Small schools are able to pay greater individual attention to students in the classroom. However, the move toward smaller schools and smaller groupings of students and teachers appears to be in direct opposition to the reduced funding that most school systems are experiencing. If schools were made smaller, in terms of student populations, school systems could use the buildings currently called schools even though they are large. Each building could house a number of independent programs more tailored to the needs of their clientele. Toch (1991) advises that we become more flexible through smaller, more diverse "schools", in order to become more successful at schooling. A number of small urban schools have achieved extraordinary results with disadvantaged, inner city students and in fact, many school systems are attempting to combat

their drop-out problems by assigning "at risk" students to "alternative schools" like Montreal's Options I and II. These have smaller enrolments - as few as thirty students in the school - and extensive teacher-student contact and remediation. The success of these programs would appear to support the argument for smaller groupings and learning environments.

A small town in eastern France, called Epinal, has experimented with its school system in a very different way (Christiane Chombeau, Le Monde, October 16, 1984). It has enlarged its schooling environment to include the entire community. Elementary school children spend the morning in school engaging in traditional school activities, and the afternoon in various parts of the town engaging instead in sport or cultural activities. These latter are organized by other than teachers, exposing the children to a variety of adults as role models.

The Reactionary Eighties

The 1980's educational reform movement in the United States can be seen as a continuing reaction against the free school movement and the open education policies of the 60's (Martin, 1989). The free schoolers' focus on child-centered and humanist education led to a reaction of centrally mandated, and rigidly prescribed curricula throughout North America. The emphasis has tended to be on measurable and basic learning objectives. This swing back to the schooling

practices of the past can be seen in Quebec's dramatic and continuing rejection of the prescriptions contained in the Parent Report and in its imposition of a centrally created and maintained curriculum. These are described in Chapter Three.

However, the observations and criticisms of the public schools that led the reformers of two or three decades ago to their radical prescriptions were still valid in the 1980's, as they are today. As well, in order to justify the reaction against the practices of humanistic and child-centred education that were implemented in the 1960's and 70's, it has been necessary to discredit schools' methods and results in various publications. Barlow and Robertson (1994) in Canada, and Bracey (1994) in the United States, accuse the media of failing to report on school systems' successes and instead of overemphasizing and even exaggerating their failures and weaknesses. The uncontrolled swing of the pendulum has meant that the experimental programs described in Chapter Four have not always received a fair trial. They have been rejected for various reasons, many of them political. The role of the media in influencing public opinion about school systems cannot be ignored. Canadian as well as American media have lately had an assured audience of concerned parents, and prospective employers for their descriptions of the school systems' failures. As Bracey (1994) says so simply, "...bad news sells".

In an attempt to mediate the two extremes of educational ideology which seem to vie for our system's soul, Toch (1991)

calls for a synthesis of the 1960's reformers' desire to humanize schools and the 1980's reformers' commitment to rigorous academic standards and students' acquisition of basic skills. These two perspectives on schooling may not be incompatible. Wickstrom (1994) argues that the need for control and consistency in the system need not be in opposition to the need for variety and creativity. In fact he suggests, in concert with others such as Toch, the desirability of a balance between the system's need for certainty and centralized control and its need to allow for variety and ambiguity.

The Continuing Appeal of Child-Centred Schooling

Since the time of Pestalozzi, child-centred schooling has been seen by many as a viable schooling model. Despite the apparent swing of the pendulum toward increased control over students' learning, child centred schooling in a variety of forms continues to be a valued reform option for many educators. However, it never seems to be adopted on a large scale and consistently.

Gray and Chanoff (1984) describe Sudbury Valley School in Massachusetts. This is a private day school which is run entirely on the principle of self-directed learning. The students there direct their own education and often learn through play. Observation of learners there has convinced the adults involved in the school that unguided play involves the acquisition of skills and knowledge and that young, playful

learners naturally evolve into efficient adult learners when they are allowed and encouraged to do so. One of Sudbury Valley School's central principles is the bringing together of people of all ages. This allows for youngsters to learn through observation and imitation of various adult and child role models.

Levin (1994) at the University of Manitoba points out the parallels between the treatment of teachers by system administrators and government education ministries, and the treatment of students by teachers and school administrators. Neither group, he argues, has very much control over what they do, when they do it or with whom they work. Neither group has much ability to influence or change its working situation in order to meet its own needs or pursue its own interests. He calls directly for student empowerment along with teacher empowerment and an end to the model of schooling which insists that students be passive recipients of information and direction from others. He suggests that this be done through sustained conversations between teachers and learners about what learning is and how it can best be encouraged, and later evaluated, in any given environment. Echoing this, Salisbury (1992), of the Florida 2000 Initiative, proposes that we involve learners in their own learning and in evaluation of their progress.

The program for the primary level of the British Columbia province wide school system's Year 2000 educational reform plan makes use of non-graded classrooms and child-centred

activity. Robertson (1994) describes the program as one in which learning is seen as active, spontaneous and directed by the child's own curiosity about the world. Curriculum and assessment reflect this theoretical base by being defined as learner-focused and responsive to the learners. Child-centred schooling is seen by the Ministry of Education of British Columbia as a viable reform option at the primary level.

Brent Cameron, also in Vancouver, goes so far as to argue that the compulsory nature of most schooling and the imposition of curriculum by authority is a violation of the essential rights of children as individual learners. His "Wondertree" learning centre works to enfranchise children through self-directed learning and allowance of choice. In fact, he defines intelligence as the ability to make successful choices, thus his goal as a learning consultant is to encourage in young people the ability to make more and more choices (Cameron, 1990).

Some home-schoolers have the same aim; they create home based schooling to allow for and encourage self-directed learning. The Canadian Alliance of Homeschoolers circulated a questionnaire to home-schoolers in 1989. Of 1000 families questioned, about 68 percent said that they used an informal, child-directed home education style. They allow their children to choose what they want to learn as the need arises. They see themselves as guides and advisors, rather than as teachers of their children. Strong objections to the compulsory nature of schooling motivate these families, while

others who choose home-schooling, about 25 percent of them, do so for religious reasons (Priesnitz, 1993).

In seemingly direct opposition to this trend toward child-directed learning and child-centred school programs are the concerns with children's acquisition of skills to succeed in an increasingly tight job market and with Canada's ability to compete globally for our collective economic well-being.

Business in Schools and Economic Demands

The 1980's can be characterized as the decade of conservative school policies in the United States and in Canada, as has been said. However, a related and even more important development has been the increased involvement of private businesses in the public schools. Business leaders have become involved to an unprecedented degree in the debate about schools' purpose and priorities. Barlow and Robertson (1994) write that the majority of business leaders believe that it is their business to influence curricula. They base their assertion on a 1993 Gallup Poll which found that 59% of Canadian business leaders believed that the private sector should be actively involved in forming educational policy and shaping curriculum and standards. Barlow and Robertson argue as well that the politicization of the school system has resulted in layer upon layer of rhetoric obscuring the reality of what the system does and how well it carries out its role in our society. This is what makes it so difficult to assess

our schools' performances and our children's progress as learners.

As well, Carlson (1992) calls attention to the fact that business models of organization and control, and business conceptions of the bottom line, productivity and efficiency are now taken for granted and treated as politically neutral and disinterested, when in reality they have a profound effect on attitudes toward and within the school system. These business models influence what we value and what we focus our attention on in schools.

Closely related to the increasing influence of the business lobby on our school system is the change that our economy is currently undergoing. Many voices have been heard in the past decade or so, arguing that workers need to be increasingly skilled and capable of learning on the job if they are to keep pace with the new demands of the job market. Actually, the evidence is that the opposite is true (Levin, 1984; Kahane & Oram, 1989 and Henchey, 1987). Technology is eliminating many middle-level jobs, leaving a high skilled job market for the few, and a low skilled job market, or unemployment, for the many. Barlow and Robertson offer further testimony from the Ontario Federation of Labour that technology is replacing many skilled workers and that hiring tends to favour those with only basic entry-level job skills.

The reformed school system proposed by those in the business lobby and by some Canadian conservatives - raising standards and demanding excellence - would more efficiently

select the brightest and most capable for the traditional high status occupations in the emerging high technology information-based industries, leaving the rest to compete for the remaining lower status jobs (Martin, 1989 and Barlow & Robertson, 1994).

It is not surprising that for those who believe that business drives our economy and our society, and that business interests are paramount in our society, the school system should concentrate on meeting the needs of business. The argument for reform of the school system put forth by those who favour the dominance of business interests in the society is not based on the needs of students, or even the needs of the society as a whole, but rather on the needs of employers. Barlow and Robertson (1994) argue that an overqualified workforce in a shrinking job market gives a great advantage to employers since they can keep wages down even among highly schooled and skilled workers.

Empowerment Through Choice

The question of introducing choice into the system is a loaded one. This is because it cuts to the heart of public schooling's mandate. Charles Phillips, writing in 1957 about the development of education in Canada, expressed the dilemma very clearly. Those who want better schooling for their own children must help to provide this for all children in the community. The public schooling experience should somehow be equal for everybody. However, equal does not necessarily have

to mean identical. The possibility of equity within the diversity implied by choice can be explored.

The public choice movement is defined succinctly by Bacharach (1990) as involving parents in reform through consumer power. This forces the public schools to compete with each other to develop a school mission that the parents will find valuable, like the educational project now encouraged in Quebec schools.

Educational vouchers are one way of providing choice in the system. The idea of vouchers has been put forth for consideration since the 1950's. Each citizen at birth receives an actual or notional book of vouchers or coupons which entitles him to so many units of education which can be bought at any time in his life. They represent his share of the nation's, or the province's educational budget. A voucher system theoretically creates genuine freedom of choice with competition on equal terms between different kinds of learning.

Ward (1973) argued as long ago as the early 1970's that options to the public schools have been pre-empted by the fact that every householder and every taxpayer is compelled to finance the system as it exists. This can be seen as inhibiting the development of alternatives since it means that alternatives are dependent on the marginal income of potential users, over and above the compulsory levy to maintain the existing system. A voucher system could facilitate a whole range of alternative experiments; street schools, community

workshops, and alternatives to school; which now receive no share of public schooling funds.

Fantini (1974) describes a system of choice that could make effective use of some of these alternatives. Each of the participating groups; teachers, parents and students; have a choice of the option that best supports their style. In a diverse society a responsive system of public education can provide a range of options and choices (Fantini, 1974 and Holmes, 1991).

Fantini lays down some ground rules for the system. No alternative within the PSC practices exclusivity. Each school works toward a comprehensive set of educational objectives; these must be common to all schools within the system. No person or group imposes an educational plan or design. Each new alternative can operate on a financial level equivalent to the per capita cost of the school district as a whole, assuming some additional costs for initial planning and development. Each alternative includes a plan for evaluation. Assessment is essential as a basis for continuing to improve the option and to help determine the relative effectiveness of each option (Fartini, 1974).

Parent associations could explore options. Advertising could play an important role as it does now with university and college programmes. Orientation sessions, special back-to-school night programmes, mailings to parents, and newspaper articles could serve to make the decisions of parents and students informed ones. The extensive time spent on public

relations would be a necessity in a system [illegible]e (Nolan, 1978).

The PSC would be an adaptive system. Options would be judged by results. As the results associated with quality education, determined by parents, students and teachers themselves, were realized more in one model than in another, the attractiveness of the successful model would grow. The options that were more successful would likely be more in demand, based on what we know about consumer behaviour, thus triggering an adaptive process (Fantini, 1974 and Urbanski, 1990).

School-based management is a reform idea that is called, by Barlow and Robertson (1994), the thin edge of the wedge leading almost inevitably to a system of choice. They decry this kind of choice in the system as being destructive of the principles of public schooling. However, Delaney (1994), in the context of providing an overview of its influence as a model, gives school-based management a favourable review as an organizational context for reform. It is described as a means to achieve improvement at the school level rather than a goal in and of itself. Using school based management, each school and district works to reorganize the decision-making structures so that many important decisions that will directly or indirectly affect the education of children are made at the level of the local school. School based management involves teachers, parents and even students in shared decision-making about the daily and long term running of the school. It is

designed to involve the entire school community in the establishment of school objectives, the development of programs to meet those objectives and the subsequent evaluation of programs. This is being done in Edmonton's public schools now and has been since the late 1970's. It seems very similar to the school councils and parent involvement organized in Quebec's 1982 White Paper ("The ABCs of Public-School Fees", Lynn Moore, The Gazette, Saturday, April 17, 1993).

Rochester's Schools-of-Choice System is a working model of Fantini's (1974) vision. Choice within the system was introduced during the late 1960's and early 1970's, as a means to organize voluntary desegregation of schools. The most important dynamic complementing the schools-of-choice movement is the school based planning agreement negotiated in the 1987-1990 contract. The teachers' union, with the district, negotiated a staffing agreement that, in addition to seniority criteria, emphasizes choice as well as racial and programmatic balance (Urbanski, 1990).

Toch (1991) argues that permitting students to select the public schools they attend can significantly improve the sense of community of a school. Indeed, where it is well established, the choice system in public education seems to work. As well, the introduction of a marketplace into public education through parent and student choice creates the accountability that some reformers seek while diminishing the need for prescriptive mandates from central authorities.

Ideally, teachers should, through their unions and associations, take part in choice as well. Such involvement empowers and engages teachers directly in modifying educational practice. Teachers become involved in decisions and management in the context of pursuing what is most essential to them. If both staff and students select a school it will achieve a firmer sense of mission and it will enjoy stronger consensus and coherence than can schools of assignment. We all need community and a feeling of meaningful connection (Raywid, 1990 and Toch, 1991).

A genuine system of choice is a truly radical proposition. Chubb and Moe (1992) argue that it consists of three basic changes to the system as it exists now. First, parents and students must be free to choose their own schools. Second, they must be given some variety to choose from. New schools of various types must be allowed and encouraged to emerge in response to the needs and interests of students and parents. Third, all crucial decisions about organization and governance must be placed in the hands of the schools. They must be truly autonomous. The authority to control the school from above must be eliminated as much as possible because any authority that remains in the hands of politicians through the central authorities will inevitably become a magnet for political pressure and will be used to reassert control when the schools exercise their autonomy in ways that powerful political interests do not like. Herein lies one of the controversies fuelling the debate about introducing choice to

the system. The controversy involves the question as to who should control schooling and who should determine what goes on in schools. This is a truly charged issue for many who are involved in the school reform debate.

A second controversy colouring the debate about choice in the system is that which questions the provision of equal schooling experiences for all children in a choice system. School restructuring through school based management and/or schools of choice could result in serious inequities between schools. Barlow and Robertson (1994) express strong objections to a choice system of providing schooling. They claim that because schools of choice will operate in a climate of competition, the children enrolled in them will also face stiff competition. The connection is not obvious to me; a school encouraging cooperation and non-competition as part of its mandate would probably have less competition between students than most public schools currently have. It is also claimed that schools of choice set out to be homogeneous. Yet the school wherein I teach, a private school thus operating in a competitive, choice environment, caters to an amazingly diverse population. The diversity of our student population is a defining characteristic of the school. I have learned of a school on the west coast, another private college, that boasts that it welcomes students from all over the world. Again, in this school, diversity is seen as a selling point. This is the opportunity of the choice system; those who value homogeneity can find it in one of the options available; those

who favour diversity in the student population can find that also. Elmore (1990) argues that, even in a system of choice, the central authorities will want to impose uniformity, as they have done for many decades, even at the expense of quality and innovation at the school level. He predicts that central administrators will have to develop new ways of handling diversity and variability in school systems. They are already facing this challenge to some extent since most large city neighbourhoods are very different from one another and school populations are becoming more diverse and varied all the time.

Barlow and Robertson argue that proponents of schools of choice believe in competition. Many of them may well do so. This does not make choice a bad option for systemic reform. Choice offers the possibility of diversity in the system to meet the diversity of the population. It offers greater levels of responsiveness to the needs of students, parents, and even teachers.

Problems in implementing a system of choice include issues of funding, staffing, and equity. Barlow and Robertson paint a bleak picture of public schools of choice being starved of both funds and students as they compete openly with private schools. However, if schools are allowed only to be non-profit, if limits are set on fees that schools may charge for their services, and the province funds all schools equally per student as they come close to doing now in Quebec, the playing field is levelled; public schools and private schools

virtually cease to have any major differences between them. Teacher associations and unions can look after the interests of their members within a system of choice and both learners and teachers can choose where they would like to work and learn. Legislation can be enacted disallowing rejection of students or staff by schools on the basis of sex, race, or disability - including learning disabilities. Concerns about discrimination in schools can be dealt with in the same way as concerns about discrimination elsewhere; anti-discrimination legislation and subsequent enforcement can benefit our increasingly pluralistic society much more than can some stubborn clinging to sameness as a valuable characteristic of classrooms. We are not all the same and there is no reason why our learning environments should all be the same either. If learning environments differ from school to school, as is already the case in Quebec, why should we not offer choice to parents and students as to which of the variety of schools they would like to attend?

There are various ways of providing schooling options; using the variety of existing teaching styles; adapting innovative classroom patterns; having teams of teachers form schools within schools; or creating new school options housed apart from traditional schools. Students and parents can select learning environments; a school, home-schooling, a learning centre, distance education, televised teaching or whatever else is on offer. It seems promising to contemplate just how much is on offer today.

The Needs of the Children

Making the context of the reform debate more urgent and difficult is the evidence that the level of stability and support in the lives of many students is diminishing. Disadvantaged students - those of low income families, single parent families, or who have mothers who work - are the fastest growing portion of the American school population (Toch, 1991). Even in Canada, Globe and Mail columnist Michael Valpy writes, "Our schools, in every community and to an unprecedented degree, are being expected to cope with physically and emotionally unhealthy children, neglected children, children whose parents lack the time and energy to be with them, substance-abusing children, children with minimal social skills, children from a vast range of bruised, stressed and fragile families." (Michael Valpy, "The 40% Factor" Globe and Mail, October 2, 1993).

A real reason for the sense of crisis present in debates about our school system is the actual crisis being experienced by our society as the family and the community break down and become increasingly dysfunctional. It is no coincidence that the two systems considered to be most in need of reform - the two systems which are considered to be in crisis - are the systems which deal with the helpless in our society. These are the public school system and the public health system. Children and the sick and elderly used to have most of their needs met by their families and communities. This is no longer true, since we have institutionalized learning and

healing. Public schools have struggled with their new roles as providers of social, emotional and even nutritional support for needy, neglected and even abused children.

The Purposes of Schooling

The reforms of the 1960's were deeply concerned with creating a safe environment for the development of the whole child. They were closer to the design of learning environments than to system reform. Now reformers want much more. They speak of the whole system and push for restructuring. It is as if we cannot stand to see schools looking so much as they did twenty or thirty years ago while the world around them is so very changed. Thus the energy being expended now in attempts to reform and restructure our school systems.

However, in the process of reforming, we have to ask what the purposes of schooling are, and what kind of citizens we hope to produce. Giroux (1992) points out that schools are the major institutions for preparing students for public life. Thus, schools should function to provide students with the knowledge, character and moral vision that build civic courage. Schools are in fact centres of culture which legitimize certain forms of knowledge and disclaim others.

This power that schools have - and have had since their beginnings - must be recognized and used very carefully. When we act as though schools legitimize knowledge without bias, we err. Witness the collapse of native language and culture

through careless schooling in the dominant culture of Canada.

We need first a philosophy of education that can provide us with clearly articulated aims. There is widespread confusion and disagreement about what our schools are for and consequently what our schools should be doing. Giroux (1992) argues that even for the white middle class majority, education often functions to silence rather than to empower children. Teachers' value assumptions need to be questioned, as do the value assumptions of state curricula and indeed of the entire public school system.

In communities, there is little agreement about the goals of school reform or how improvements might best be measured. It is at the level of community, and arguably even lower - at the level of each school, that the debate must be resolved. The schools lack and need a methodology for creating consensus about their goals. There is a need to promote informed thoughtful discussion about the purposes of schooling among teachers, students, parents and community members - possibly through local school boards (Wagner, 1993).

Serving the Public Interest

Are schools to uncritically serve and reproduce the existing society or should they challenge the social order to develop and advance its democratic imperatives? Advocates of critical education challenge all those involved to reconsider

and recreate their prior knowledge (Frankenstein, 1992). The purpose is to create a citizenry critical enough to both analyze and challenge the oppressive characteristics of the larger society so that a more just, equitable and democratic society can be created (Giroux, 1992).

Something very like this is being done in some parts of Quebec through the idea of popular education, which is government funded through women's centres, youth centres and other groups, but aims to empower citizens to question and oppose, where necessary, situations in the society which exploit them. This concern with critical pedagogy implies a shift towards multiculturalism and the promotion of difference. A critical curriculum that emphasizes anti-classist, anti-racist and anti-sexist social reconstruction and that uses the viewpoints and experiences of oppressed groups would be a fundamental step in the direction of preparing students for democratic participation in a complex, multi-cultural and rapidly changing world (Carlson, 1992).

It is argued that educators have a public responsibility that involves them in the struggle for democracy (Giroux, 1992 and Barlow & Robertson, 1994). Thus public schooling is much more than preparation for the tyranny of the job market. Democracy is a celebration of difference, and the dominant groups fear this. Thus one of the aims of schooling could be to allow and encourage questioning of the dominant philosophies and assumptions of our society. However, this cannot be achieved when politicians, through powerful and

centralized school authorities, dictate what will go on in schools.

The Question of Curriculum

The existing model of teaching and learning could be replaced by one that engages students in active problem solving, and knowledge acquisition through problem-solving activities. There is more and more evidence that learning involves deep understanding and active engagement in the acquisition of new knowledge (Marton, 1975). Curriculum can encourage or hinder deep understanding.

Many feel that all students need to master a common core of shared knowledge, the important question is, who will participate in the formulation of that knowledge and whose interests will it serve? Banks (1991) argues that such knowledge could reflect cultural democracy and serve the interests of all of the people in our pluralistic nation. Again, these questions need to be answered in communities by the people who live and work there.

Hargreaves suggests that if substantial curriculum reform is to be developed and implemented effectively, teachers, as a routine and scheduled part of their work, must be encouraged to move beyond their own classrooms into other classrooms, into regular scheduled meetings with colleagues, into other schools and into contexts where they consider and discuss educational theory. With such a reconstruction of teachers' experience, the curriculum development that teachers come to

own will likely be of a bolder, more imaginative nature. What Hargreaves argues for is not likely to happen given the way schools are now organized. Teachers simply do not have the time.

Hargreaves has a plan for achieving his ideal of teacher initiated curriculum development. He argues that curriculum development and decision-making must be substantially decentralized. School-based curriculum development must have sufficient scope to allow for flexibility, responsiveness and sensitivity to individual and community needs. Decentralized curriculum development must be accompanied by parallel changes in the culture and work of teaching, as has already been described. These two changes must be coupled with a set of centrally produced guidelines directing schools to provide a broad and balanced curriculum in a way which recognizes and rewards a wide range of educational achievements. This can be done at the provincial level in Quebec. Different areas of educational experience and forms of achievement to which all pupils have an entitlement could be centrally defined. They must then be mandatory and accompanied by practical examples. They should lend a sense of direction, an overall purpose.

The fourth component of an alternative curriculum development strategy is classroom feedback for teachers based on students' work. These are forms of pupil self-assessment, sometimes called pupil profiles, sometimes records of achievement. They include a regular one-on-one review between each pupil and their teacher of progress, performance,

experience and both their achievements. The periodic process of one-on-one review makes assessment part of learning, rather than a judgement passed on performance when the learning is over. It is designed to draw attention and give recognition to a wider range of achievements and experiences than has been customary. It is intended to give pupils a sense of greater responsibility for their own learning, a say in what they do and how they do it. It is also meant to improve teachers' diagnoses of pupils' learning needs. Supplied with this feedback, teachers can match work to a pupil's abilities. This fourth component links curriculum development with assessment development. New patterns of pupil-based assessment develop the pupil, the teacher and the curriculum. They form a mutually reinforcing system. However, these kinds of assessment and curriculum development strategies will only prosper if the scope for curricular adjustment at school level is wide. Also the management and funding of teachers' work will need to recognize and encourage contact with individual pupils as a routine part of that work (Hargreaves, 1989).

New Roles for Students

A number of new roles for students have been proposed in the 1980's and 1990's. Many people agree that students should learn to collaborate; that includes working constructively together as well as communicating effectively. Reich (1990), for instance, calls for numeracy, literacy, responsibility and

collaboration as goals for students. Hawley (1990) calls for going beyond improved performances on standardized tests and developing a capacity to learn, to be intellectually resilient, and to make better decisions in seeking to solve complex problems. Generally, students are now expected to learn critical thinking skills, study skills, problem-solving strategies and collaborative methods of work. Yet, assessment tools have not completely kept up with these new roles and demands. Standardized testing remains an ubiquitous assessment tool.

New Roles for Parents

Virtually all researchers who study student achievement agree that it is significantly related to the extent to which parents are actively involved in their children's learning (Constable and Walberg, 1987). Marburger (1990) argues that a child's schooling is vitally affected by the level of involvement of parents in the child's school experiences and in the school's workings. Riley (1994) argues that ideal parent involvement means reconstructing the school as a place where parents are partners in the decision-making. The traditional educational hierarchy can begin to question itself and the ways in which it functions. The situation as it is now excludes parents from most decision making. This is not true in Quebec in certain schools with vocal parent committees and school councils. Chapter Three describes the legislation

enacted in Quebec that has given parents strong voices in the schools that their children attend.

New Roles for Teachers

It is argued by Shedd (1990) that collective bargaining over educational policy issues will represent one of the most distinctive features of future bargaining in public education. Collective bargaining is likely to assume more prominence in the overall management of school systems in the coming years, but with new issues such as decision-making, collegiality and professional development.

Sykes (1990) argues that promising programs and practices of teaching originate in many locales and should be available for scrutiny and trial. This can be done through professional journals inviting more teacher submissions. Professionals can stay abreast of developments in the field. To this end administrators should provide opportunities for teachers to identify and evaluate new materials, instructional strategies and programs. As well, teachers can open their classrooms to observation and become more articulate about their practice than they have been.

The Task Force for Educational Technology in 1986 defined teachers' new roles to be those of diagnostician of students' needs, designer of individual methods of instruction, and manager of technological resources and learning experiences. These new roles for teachers reflect new roles for students as well. These have been discussed above. However, the new

definitions of teachers' professional roles cannot be decided or imposed from outside the schools. The change in teachers' roles can be expected to evolve over time and to adapt to local conditions as teachers and school officials explore alternative approaches, experiment with new forms and negotiate a new order. It is also worth bearing in mind, as Postman and Weingartner (1987) point out, that there can be no significant reform of the school system that does not have at its very center the attitudes of teachers.

The School as a Learning System

Mitchell (1984) defines a system as a set of entities and, importantly, their inter-relations which are organized to fulfil some purpose. Thus a systems approach, which has become popular in the current reform literature, consists of analysing an operation as a whole; in terms of the whole, there is no validity in optimizing a single component subsystem separately.

The immense educational challenge of the future requires a new paradigm. The school as a system should be able to accumulate improvements through evaluation and revision. To be improvable and adaptable, schools must accumulate critical operating data and use that data to make planned revisions; they must be designed to learn and develop (Branson, 1990 and Mitchell, 1990).

Gideonse (1990) goes further to say that insofar as a school's operation was collegial and collaborative it would,

as an institution itself, manifest signs of learning. To the extent that schools adjust their practices based on experience, they demonstrate agreement between their own behaviour and the larger learning aims that they purport to serve. The design of self-correcting cybernetic feedback loops in the system's decision-making and consensus-building processes can help to ensure the adaptability of schools.

Miller (1994) links systems thinking in the context of schooling with a holistic perspective. He invites us to attempt to view learning in the context of the entire school and its community environment. The school can be seen as a complex system that evolves through a sense of purpose and collaboration between all components of that system; staff, students, parents, community members and resources. Cameron (1990) reminds us that each child is a system among many other systems. He suggests that all parts of the system should experience success, and that success be on their own terms. For him, the recognition of the personal and self-directed quality of learning is essential to complete understanding of the learning environment as a system of systems.

The school system as a whole can be enriched by its inclusion of a wide variety of learning environments. When we make this mental shift, we open ourselves to a large number of alternatives which already exist and function. Many are privately run and thus function in a competitive environment that demands flexibility, responsiveness and adaptability; the characteristics that those calling for systems thinking

declare to be most necessary to the viability of our schools.

Viability Through Diversity

The alternatives to the conventional classroom, many of which were created in response to the system's failures, needs and areas of weakness, are examples of the system's responses to feedback from its demanding and critical environment. This is not true if we define the system closely as "elementary and secondary schools funded by the public sector", although even within that limited system there are now alternatives which did not exist before. However, when we greatly extend the system's boundaries we can see a plethora of programs which are the system's self-correcting management of the situation.

Home-schooling, free-schooling, private schools, educational broadcasting and outdoor education are all examples of the system's dynamism. The system's ability to come up with novel approaches and diverse alternatives is also its hope for survival. We speak of bio-diversity as being essential to an eco-system's health and viability. We speak of diversifying a manufacturer's product line as a way of ensuring continued market share. Why not applaud diversity in our schooling environments and in people's ideas about teaching and learning as healthy and essential to the society?

CHAPTER SIX

Ideas From Which We Can Benefit

Introduction

There are many ideas that have been tried and that can function well. These form alternatives to the traditional classroom. The programs and ideas presented here are not all that exist. These are some that seem most promising from among the ones that have been presented in the literature. Each has ideas to offer and many share similar attitudes toward children and learning. They are presented here in a roughly chronological order.

The Montessori System

The Montessori System has been very popular as a learning environment for young children. However, its tenets can be helpfully inspiring to those who work with older children as well. The system is based on the following beliefs. To function adequately as a responsive and responsible social being, the child must develop sensitivity to the feelings and rights of others, and skills and attitudes requisite for adjustment, adaptation, cooperation and initiative in social situations. Education must focus on physical, intellectual, emotional, moral and social development. The Montessori System has a focus on problem-solving and decision-making skills. Cameron's (1990) definition of intelligence as the ability to make good choices echoes. In the process of

thinking and solving problems, the child is actually structuring her own intelligence. Existing constructs, or schema, as Piaget called them, are in an almost constant state of revision and expansion as successive relevant experiences are grappled with (Fleege, 1979).

A sense of responsibility for self-development is encouraged. Then, self-esteem is nurtured as the child experiences daily successes and becomes more clear about himself and what he can do. Another aim is to help each child experience success within a framework of internalized ethical values. Basic to the system is the belief that every child is born with a desire to learn. As well, and significantly, how the child comes to feel about himself is more important than what he is learning to accomplish. The Montessori self-learning environment fosters the gradual acquisition of the habits requisite for a lifetime of learning. As well it fosters the acquisition of core academic skills, which become the tools for a lifetime of creative learning (Fleege, 1979).

Montessori Methods

A disciplined child in Montessorian terms is one whose behaviour is directed from within in accordance with given rules and expectations. An inner change in behaviour cannot be accomplished by pressure from without. Children need to experience freedom and inner control at all stages of their development. Ground rules limiting the freedom of children are discussed democratically, leading the children to ask

questions, to express their opinion and finally to voice their acceptance (Fleege, 1979).

The Montessori method of instruction is primarily that of assisting the individual in learning through guided discovery. The teacher will identify the specific needs implied in a child's behaviour and introduce the child to a relevant activity with a specific, realizable goal. Meaning for the child partly determines the nature and content of the learning curriculum. The learning environment must provide for every child a match for his developmental needs. Grouping of children is flexible, according to level of development, and motivation is aroused through assisting children in setting realistic goals. The Montessori System also goes on the assumption that an effective educational program requires the close cooperation of school and home (Fleege, 1979).

Family-Designed Learning

Family-Designed Learning is described by Esbensen (1973). It is designed to give a great deal of control to parents and their children.

Using very specific listings of learning objectives, the parents and child choose what will be covered during the year, or the semester. These learning objectives are embedded in a student contract, a request that the student do a series of things. Whenever a student begins to work on a new contract from among the ones selected by him and his parents, he must make a commitment as to when he will complete the contract.

This is called a bid and the procedures governing it have been elaborated into a system called the Bid Game.

A student does not need to compete with others to win at the Bid Game. He need only fulfil his commitments as a responsible learner. To the extent that he does this, he accumulates points, which may be used to buy time for other activities in which he is interested. The purposes of the Bid Game are to improve a student's ability to assess his own capabilities in relation to specific learning tasks, and to increase his level of achievement motivation. It is assumed that the accomplishment of these attitudinal goals will promote the development of self-directed learning.

A weakness of this system is the amount of time required of parents. Some parents may not feel comfortable with this level of involvement in their child's education.

Individually Guided Education

Individually Guided Education (IGE) is also focused on encouraging students to be self-directed learners. Bahner (1979) explains that those involved believe that education should help students develop an attitude of being life-long learners, should provide them with learning processes, and should help them to become aware of their full potential.

Education should involve learning by doing and practising. It is important that education help a learner understand the manner in which she learns such that she may be more self-directed and accept more responsibility for learning

throughout life. For proponents of IGE, the means of becoming educated are the true ends of schooling.

Common to all IGE schools is the fact that students have long range goals, and specific objectives for a given period of time. They can choose from a variety of appropriate activities to help them reach those objectives. Student evaluation is a cooperative endeavour between the student and the teacher. They devise a variety of assessments of the degree to which the student is achieving her learning objectives. They also evaluate the manner in which the objectives are being achieved. They assess the degree to which the student is learning how to learn.

Bahner (1979) asserts some of the basic principles of behaviourist educational technology in describing the organization of IGE. When learning objectives are pitched at a level to ensure success most of the time, a student knows clearly what she is to achieve, and obtains feedback of her success, motivation and morale remain high and the major causes of school discipline problems disappear. Inactivity or time spent socializing are acceptable providing the responsibilities of the student are met. Academic interaction and students helping others are encouraged. Self-directed student movement within the classroom and throughout the school is considered to be normal.

In the IGE system, parents, students and advisors act as a triumvirate in program planning. This calls for good interpersonal skills. Parents participate in the learning

program as much as they feel comfortable doing so; attending study groups wherein they learn how to provide an intellectually stimulating home environment, assuming a teaching function, or acting as an aide (Bahner, 1979).

This system could not work well for everyone. Some parents may not feel comfortable with any involvement at all. Some students may not have educational goals to enable them to benefit from this system.

Individual Education

The system of Individual Education is based on Alfred Adler's Individual Psychology of Power. It is described by Corsini (1979) as being an environment that operates on the assumption of absolute equality and children's rights. This is very similar to the more current work of Brent Cameron (1990). In this system, there is the belief that the most universal of all motives is the motive to improve one's powers, to learn, and that every human being interprets how to attain this goal of superiority in a unique way. In other words, self-directed learning is the only truly motivated learning (Corsini, 1979).

This system assumes that the child knows best what she wants to learn, but also when to learn, how to learn, how long to study, under what conditions and so on. IE puts the child in charge of her own education. The teacher will help her to set goals, tell her what he thinks is important and give her a variety of ways to go about achieving those goals. IE calls

for the provision of units of instruction, with clear, attainable goals.

Corsini describes practitioners of IE as being enthusiastic about testing. They use classroom tests as an informal assessment of progress, unit tests, review tests covering several units, practical tests to measure what the child can actually do, and standard scholastic achievement tests. At the same time, those practising IE believe that schools with a rigid schedule of curriculum are harmful to a love of learning. So, they use a community based creative program to augment the state mandated curricula.

Parents, teachers and students write down any specific subject that they would like to either teach or learn, and then the school tries to make a match of interests, goals, and schedules. Children, and possibly parents, can then sign up for the courses they would like.

Corsini claims that evidence of progress helps students to move along. This is the function of the Progress Chart in the IE system. Reports are made only to the child. The child reports to the parents about progress or lack thereof. IE makes constant use of units; a lot of development would be needed to implement this system. Curriculum guidelines are used as well; these can be generated by the local or central school system authorities, or by people in the school community.

Each student's program of study is completely individualized because it is largely created by the student.

The student goes through stages of educational planning. First, there is testing to determine his level on each subject taught. Then a counsellor informs him of the facts relative to grade levels and testing results and advises him academically. The child's academic activity is actually up to him. He is tested objectively for every unit, and results are made known to the counsellor who records this on the progress chart. Once a month, the child and the counsellor review the progress made. However, students make all final academic decisions themselves.

The system also uses weekly discussion groups of one adult and about four to eight students. This is pure socialization and personal discussion and is one of the most important parts of the program. The discussion groups have been observed to generate strong loyalties, and develop solidarity in a group. The groups are moderated by having a responsible adult as a member (Corsini, 1979).

This system assumes a high level of maturity on the part of the child. This limits the design; it may work well only with adolescents. This is also a complex system and would require a large amount of time, and therefore of money, to implement.

Education By Appointment

Education By Appointment is a system of nonscheduled learning that was developed for use at the high school level. The idea presented by Roth (1979) is that schedules are rarely

created for students, but rather for teachers and administrators. An alternative to the well-known tyranny of the clock, the calendar and the schedule is a system where each day brings different needs that are met by a series of appointments.

Within any school, one can classify students according to the degree of dependence or independence they have on the teacher. Students tend to be either low, medium or high in this dimension. Roth has found that students low in teacher dependence do not need much structure provided for them. Students high in teacher dependence need quite a lot of structure, feedback and monitoring. They need approval, attention, reinforcement and direction. There are shorter, more frequent appointments for high dependence learners and longer, less frequent appointments for low dependence learners. Thus teachers in this system give unequal amounts of time to different students. The goal is to bring the high dependence learners to greater independence (Roth, 1979).

This learning environment and almost requires students to work at learning with their friends or with persons of their choice. When learners are free to get help from friends as well as teachers, when they know that in demonstrating learning they will be rewarded and finished with the course, there is a greater motivation to work well and finish. In this system, when a student does not know how to proceed, she should go to a peer first for help. The teacher is the resource person, available when other students cannot be of

help. Students help other students immediately, often in language and terms they can understand more readily than the teacher's explanations. This system multiplies the number of teachers by the number of students (Roth, 1979).

Roth explains that if a student completes a course and immediately gets a statement of credit earned, motivation may be enhanced. School learning has traditionally been a slow and tedious process, but it need not be.

Roth explains that this environment works on the assumption that the best learning activity is the one that the student implements. Learning is a personal activity based on interest and curiosity. This alternative system, like quite a few others, gives the student more choice and responsibility than does the traditional classroom environment. In order for this to happen, people at the top of the structure, like the principal, should steadfastly refuse to do those things that those at the next level, like teachers, can do for themselves. Persons at that level should refuse to do for those at the following level, the students, what they can do for themselves. Roth claims that because of this, decision making is shared, choices are imperative and growing independence is assured. There are self-tests for the students and summative tests can be used to issue credit for learning accomplished whenever the teacher thinks this is necessary.

In such an environment, students learn how to learn through practice. They understand that they have to use the learning skills they have acquired to find information, work

out solutions, and discover new meaning. Role-modelling on the part of teachers is very important. Teachers who are not involved momentarily with helping students can read, take notes, or do research in the library. In the same rooms that students are in they can prepare objectives, create courses, write, read and solve problems. They can accomplish many of their responsibilities in the environment on school time, just as students do (Roth, 1979).

This system can accommodate a wide variety of community-based course offerings. As well, the system is advantageous in the area of practical and industrial arts. Students can block out half a day or an entire day to complete a project that would suffer from the fragmentation of time dictated by a conventional school schedule (Roth, 1979).

A weakness of this system is its dependence on highly motivated and dedicated teachers and students. The level of trust required in this system is high.

Open Education

Open education is another alternative learning environment that has been with us for quite a few years. Rogers (1979) explains that in an open education environment, space is used in free and flexible ways, and the activities of children are many and varied. The origin of children's activities is quite spontaneous and child-centered, thus the range of topics studied is wide and open-ended. Time and daily scheduling are flexibly arranged, and interactions

between teacher and child are begun as often by the one as by the other. As well, the teaching target is often the individual rather than the group, and interaction among children is free.

Open schools seek to provide the opportunity for service, responsibility and work in the school community and beyond, recognizing the importance of these responsibilities to the child's healthy development. Open schools are organized so that children of many ages play, work and share together. Also, adults from many walks of life and ages are encouraged to appear regularly in open classrooms. There are as few rules as possible in open classrooms, and these are devised by adults and children together (Rogers, 1979).

Cooperative Learning

Cooperative learning has gained in popularity in the past few years and hopefully will continue to do so. It can be used as a strategy for achieving social equity and justice in classrooms and for helping students to understand how cooperative behaviour can be applied in broader, societal contexts as well. Cooperative learning is a pedagogical approach in which a teacher structures learning so that groups of students work together to achieve a shared learning goal. Each student is responsible not only for his learning, but for other group members' learning as well. The key to cooperative learning is positive interdependence and individual accountability (Sapon-Shevin and Schniedewind, 1991).

Cooperative learning is democratic; all students are active participants and have equal access to learning opportunities and resources. Groups are heterogeneous; mixed by ability, race and gender. The teacher structures learning carefully so that each student in a group has an important task. Students are taught skills to help others so that all can succeed (Sapon-Shevin and Schniedewind, 1991).

Slavin (1987) reports that research supports the premise that working in cooperative groups fosters more positive student interaction among diverse groups. The structure of cooperative learning itself is conducive to positive intergroup relations. A cooperative, multicultural classroom is democratic; students take responsibility for themselves and others, and heterogeneity and diversity are highly valued. The teacher is careful to organize instruction and activities in such a way that children who are not from the majority culture are not made to feel like "outsiders". In cooperative classrooms where intergroup competition is not used, student cooperative groups are often encouraged to help other groups, thereby fostering a feeling of total classroom cooperation.

In classrooms where intrinsic motivation is the goal, teachers discuss with students the rationale for helping everyone learn and the values of responsibility for self and others, sharing and caring. There is now substantial evidence that students working together in small cooperative groups can master material presented by the teacher better than can students working on their own. Slavin also claims

that individualized instruction can be combined with cooperative learning; group members do not have to be at the same level, or doing the same thing, in subjects like math and spelling.

Limitations of this educational practice include its use with students struggling with Attention Deficit Disorders and who have problems focusing on the task at hand. As well, cooperation between students requires the elimination or suppression of students' competitive attitudes. This may not be easily achieved. Finally, students working cooperatively may not be involved in self-directed inquiry. Their studies will probably be based on textbooks, workbooks and assignments given by the teacher. One could question the level of actual interest in the material on the part of the students.

Collaborative Environments

Collaborative skills consist of such social skills as listening, encouraging others, giving constructive feedback and checking for understanding. Also, students can learn how to "process" their group; analyze its functioning by discussing what contributed to or detracted from the smooth working of the group. Research indicates that group processing may result in higher productivity and improved individual achievement in both cooperative and collaborative learning environments (Johnson et al, 1990). As well, when students are given opportunities to understand and practice applying cooperative skills beyond the classroom, they can

understand that cooperation is a choice and that they have the skills to make that choice a reality (Sapon-Shevin and Schniedewind, 1991).

Collaborative learning environments should be characterized by shared knowledge among teachers and students. There is a corresponding blurring of roles, with shared authority and responsibility among teachers and students. The teacher has a new role as guide in learning. As with cooperative learning environments, there is heterogeneous and small grouping of students (Chung, 1991).

Collaboration is not cooperative learning. Cooperation is a form of collaboration. Collaboration refers to the more humanistic relations in the classroom in order that learners become more autonomous and responsible. In collaborative learning, learners are active and the gap between teachers and learners is narrowed because knowledge is created collaboratively rather than transferred from teacher to students (Chung, 1991).

The computer can be a valuable tool in the collaborative learning environment. The difficult processes of studying texts for meaning, imagining different ways of thinking about a topic or issue, communicating those ideas to others for review, and then embarking on whatever new cycle that review suggests can all be facilitated by the computer. Students can see what others in the class are up to and writing becomes more of a dialogue within the classroom community than an abstract, required act (Barrett, 1993).

Action Research

Action research with students as co-researchers can be an empowering experience for students and a strategy to provide feedback to the system to help it become more adaptive. Students can work to identify barriers to learning in their school environment. In the case of a research project conducted by Suzanne SooHoo (1993), collaborative action research with students as key participants had the immediate impact of applying research to classroom practices. Students were not only recipients of these findings, but generators of the knowledge gained. Students began as co-researchers, investigating their learning environment, and emerged as agents of change, actively influencing the governance structure of the school (SooHoo, 1993).

Community Education

Community education in the United Kingdom is very similar to the idea of popular education here in Quebec. Both try to act in solidarity with those people in society who have least power, enabling them to analyze their situation and to achieve political change (Martin 1987).

Richards (1987) explains that community education is based on access to any educational opportunity for anyone at any time, greater participation by more people in the decisions about the use of educational premises and the kinds of curricula that are offered by them, and informal learning in the family, in clubs, community centres and on street

corners. The key concept is identified as lifelong education. Some people believe that our present system of education is unfair and does not enable the vast mass of people to develop fully their talents and abilities. Keeping in mind that education cannot altogether compensate for the shortcomings of the society of which it is a part, the contexts of formal schooling may actively prevent the schools from promulgating a more just society (Mitchell, 1987).

Many schools do involve themselves in many ways with their communities. What few of them do is carry out any systematic recording and assessment of community education. Planning for school based community education could be an integral part of the school's ongoing self-assessment and development (Richards, 1987). Also, school based community education does not automatically and exclusively imply "on the school premises" (Mitchell, 1987). A `community education campus' or a `neighbourhood centre' does not need a school as an institution. It may need the facilities. All that is required initially may be the possibility of gaining access to resources and facilities that have until now been locked away behind closed doors.

Once the doors are unlocked and the local residents get used to having access to them, they will want to develop their own policies as to their use. One way of securing access is to alter the system of management and governance of educational campuses (Richards, 1987).

LearningSphere 2000

Reigeluth (1987) and Reigeluth and Garfinkle (1992) envision a learning environment which they call LearningSphere 2000. In this system, each student will have specific learning goals and can work on these alone, in a pair, or in a small team; with an expert, a facilitator or nonhuman resources; at a site in the community, a computer-based multimedia center, or wherever. Choice is a very important characteristic of the system. Students will gradually be given more responsibility for directing and managing their own learning, though some will require more structure than others. Acting as a tutor is also a valuable experience for students, but they will receive training before taking on the role.

Learning contracts will serve a planning and monitoring function. The parents, teacher and student will meet every three months or so to establish a contract for the next period and to review the child's accomplishments on the previous contract. A computer management system will help the teacher, student and parents to prepare the contract and to keep abreast of the student's progress. Students' progress will be assessed in two ways; separately in the academic disciplines and across the disciplines in a series of real world projects. The design is not very specific about its computerized assessment tool, although this is crucial to the whole system. It is described as a locally administered, computer-assisted, attainment-based performance-based assessment system.

Many of the target understandings and skills will be the same for every student, this is state mandated in Quebec, but personal learning plans and variety among learning situations will provide different means of attaining the same ends. A teacher/guide will work with a child for a developmental period of three to five years. There are four developmental stages relevant to the school system; ages 3 to 5, 6 to 9, 10 to 13, and 14 to 18.

The parents and community are important sources of learning, therefore one of the teacher's roles will be to orchestrate and coordinate efforts by parents, and community members. Teachers/guides will work individually, and in small groups, with children.

Parents will choose teachers/guides for their children and clusters of guides will work together to avoid professional isolation. A consumer aid office could provide parents with information about guides, clusters and resources. Clusters, which are learning environments, will function like independent schools. A cluster usually will consist of about 3 to 6 guides, their assistants - apprentices, advanced students, or volunteers and their students. Each guide will decide how many children to accept; in other words, what portion of a full load to accept. The importance of parent satisfaction prevents this number from becoming too large and the guide's need for income prevents it from becoming too small. The expenditure per child will be equal across all

clusters for a given developmental period, except for supplements for children with special needs.

Learning centres will provide instructional resources in specific content areas like science and physical education. There could be mobile centres, community learning centres and shopping mall centres. The older children will use these specialized centres more. Technology will play central roles in teaching, assessment and tracking of learner progress in this system.

School systems have become systems of learning and development. Therefore the system will integrate services for children and their families from birth through age five; day care, health care, parent support and training, counselling, community education, recreation and leisure, culture and family literacy efforts will all be integrated. The LearningSphere 2000 System will be a self-designing learning system where system wide crises will be minimized. Making change client-based rather than bureaucracy based will be the most important innovation to accomplish this.

Summary

There are many good ideas to be used by educators and instructional and curriculum designers alike. The Montessori system has much to offer. The range of choice based systems are promising. Cooperative and collaborative learning environments can be incorporated in the system's design. The ideas of action research and of community education and

critical pedagogy can help in the design of feedback mechanisms in the system. There is a wealth of educational diversity and creativity in our society right now. Educators and legislators can use it to its full potential and celebrate it, rather than trying to legislate it into controlled uniformity or standardization.

CHAPTER SEVEN

An Alternative Educational Environment for Quebec Children

Philosophical Underpinnings

Any educational environment should be structured in part by a philosophy of education because beliefs about learning and teaching have significant influence on what goes on in classrooms. Therefore, these should be stated clearly and made available to anyone wishing to become involved in the learning environment. The educational philosophy forming the framework of this particular learning environment is as follows.

Learning is a natural human process and a very personal one. People often enjoy learning, although it can also be difficult; reformation of one's world view based on new information can be troubling and time consuming (Winn, 1990 and Kember, 1991). Despite this potential discomfort, children are curious and eager to learn about their world. Learning is an active process, although it can be incidental. Learning is based on interest, curiosity and the desire to live in a meaningful environment. People attempt to make sense of experience, whether it be mediated or immediate. Thus, learning can be seen from a constructivist point of view. Constructivists view reality as being personally constructed. All knowledge is subjective and learning is problem solving that involves personal discovery and construction of a world view (Cooper, 1993).

Some kinds of learning occur naturally from the moment we are born until the moment that we die. Schooling is an attempt to regulate and focus learning. The idea of having to force people to learn, or to bribe them to pay attention through extrinsic rewards and punishments is antithetical to this design. The fact that children at a grade five or six level of schooling, aged eleven or twelve, can hate school, hate books and hate learning is possibly the school system's greatest failure and our society's greatest loss.

Skills that may be of value to people today are skills of information acquisition, processing and evaluation. The most valuable knowledge that we can impart to students may be knowledge about what is available to them in terms of information and technical support should they wish to inquire into any given question or area of human endeavour. Knowledge that is to be valued is knowledge that adds to an individual's understanding of himself or of the world. The emphasis should be on quality of learning, not quantity. Instead of providing complete coverage of a subject, it would be more fruitful to teach students the skills necessary to discover information for themselves and apply the information to novel problems (Kember, 1991).

Marton (1989) identified three kinds of competence which schooling might aim to develop; conceptions, skills and knowledge. Conceptions refer to students ability to perceive and understand. Skills are what the student can do and knowledge is the factual information that students can recall.

Development of these three competencies is seen as important in this learning system. Curriculum to insure their development can be created by both the learner and the educator.

Cognitive learning is increasingly being defined as a process of creating meaning and generating relationships between concepts. Learning is thus seen as constructive (Kember, 1991 and Cooper, 1993). The most valuable attitude that educators can lead students to is an attitude of belief in one's own mind and potential to learn and become. This belief lives closely to an attitude of inquiry and curiosity about the world.

The values that children come to hold are of critical importance to the wellbeing of those children and of their society. Teaching of values is perhaps the educator's most important task. This teaching is best done through example. Educators should attempt to pass on to their students those basic values which the society holds.

The most appropriate world view for young people to acquire is one of a world that is whole, vast and intimately connected to each one of us. Young people can and should see the world as full of questions and problems that can be addressed, but also as wonderful and always changing. The learner should decide what questions she will ask, when, about what subjects and in what context. In this way, the student learns to ask questions and to find answers to them; these are worthy lessons encouraging the curiosity and eagerness to

learn necessary to people in the information age (Nemiroff, 1992).

Another attitude which is essential to success in life is belief in one's self. The learning environment should be a place where children learn their strengths and abilities, as well as their limitations, and where they can experience the joy of succeeding on their own terms, by their own standards, as well as through the responses of the educator or their peers (Barth, 1972; Featherstone, 1976 and Cameron, 1990). When people do not believe in themselves, but rather question their ability to deal with the world, then the view of a world full of questions and problems becomes a threat and an imposition, rather than an opportunity for learning and creativity. The learning environment should be enabling and encouraging.

Figure 1 shows the influence of past models of teaching and learning on the design presented in the following pages. The models presented in Figure 1 were introduced in chapters four, five and six as alternatives to the traditional classroom.

Influence of Past Models

Model	Concepts
American Progressives	self-directed learning active participation cooperation over competition self-generated questions leading to inquiry democratization of the learning environment
Free School Movement	empowerment of students non-hierarchic environment student generated curricula
Wondertree (Cameron)	allowance of learners' choices development of ability to make intelligent choices as learners small sized learning centre (less than 30)
Individually Guided Education	encouragement of enjoyment of learning student goal setting goal of developing learners' self esteem learning by doing collaborative effort between learner and educator at learner assessment
Individual Education	concern for children's rights and equality community involvement in teaching and learning whatever interests people use of learner requested tests to measure progress
Open Education	allowance of spontaneity and curiosity consensus decision making for rule generation service, responsibility and work in the community for the child's benefit many ages in one learning environment
homeschooling	learning as opportunity, not duty
deschooling	encouragement of learning based on genuine curiosity and desire to understand break schools' monopoly of teaching/learning everyone has something to offer
critical pedagogy	concern about legitimizing and devaluing certain knowledge development of critical awareness knowledge being created, not transferred
PSC (Fantini)	choice of non-profit learning environments

Figure 1

The Learning Circle

The learning circle design shares its name with a design for adult learning developed elsewhere in Canada. The learning circle for elementary level students is presented here as a new design for Quebec children. The learning environment is a safe space, a circle, where children of varying ages can learn at their own pace and in own their style. It is bright, comfortable for small people and for larger people, and full of resources; books, videos, computer hardware and software, paper of all kinds, tools, materials and a door that leads to the whole world outside the learning environment.

Each learning environment has its own structure. However, the basic system is made up of the learners, the educator, the learning environment and the community surrounding it. The educator has a working model of each learner in the form of a learner profile. The educator is an assessor, diagnostician of learning needs, facilitator, guide, advisor and tutor. Within the learning environment are small learning groups, space and tools for the production of print and graphics by learners and the educator, a collection of print and graphics materials - many of them books, computer hardware and software, equipment for production and use of audio materials, equipment for production and use of video materials, an art and craft production area and a play area.

There are no more than sixteen students working with each educator. There are no more than sixteen students in the

learning circle, although several groups each in their own circle can share one building or site. We will call this a learning centre. When there are more than about ten to sixteen students in any given room, noise becomes a problem and students have to be quiet. When students are quiet they are not communicating ideas or asking questions and it is in communicating ideas and asking questions that people generally learn.

Children in the environment vary in age, but only within a certain range. That range is determined by the educator. One person may feel comfortable working with children ranging in age from five or six to twelve years. Another may wish to work only with children ranging in age from eight to ten years. Children remain members of a particular circle for more than one school year. They remain for as long as they and the educator feel that they should. The greater the age range within a learning circle, the more peer tutoring and responsibility for younger learners can be encouraged (Featherstone, 1976). The learning environment is heterogeneous to the point that it mirrors the community wherein it is situated. The work - projects, research, learning and practising -is done cooperatively, so that ultimately everyone in the circle is responsible for the learning and wellbeing of everyone else (Slavin, 1987).

People spending time in the learning circle can also eat and drink there. Lunch and snacks can be provided by the learning centre, or by parents and students. Children can

spend most of their day at the centre, so that it functions as a day care centre for those many students who would otherwise go home to an empty house or use some other day care facility.

Care and supervision at the beginning and end of the day need not be provided by educators. It can be provided by parents, older children or recreational animators provided by the municipality. The idea is to free the environment from assumptions about what schools are, that it may better meet the needs of the community in which it is situated.

Associated with this notion is the welcome extended to all members of the community who might wish to help, or to take part in programs offered at the learning centre. The learning centre can offer programmes to people of all ages and invite community members to teach and learn by creating programmes and attending these programmes. Since schools now attempt with more or less success to fulfil increasingly demanding and complex mandates within their communities, why not open the learning centre up totally to its community, so that it becomes a true community learning centre (Clark, 1987 and Mitchell, 1987)?

Roles of Members of the Learning Circle

The educator in this environment takes on a role very similar to the one defined by the Task Force for Educational Technology (1986). They defined teachers' new roles to be those of diagnostician of students' needs, designer of

individual methods of instruction, and manager of technological resources and learning experiences.

Here the educator diagnoses students' needs and tutors students or guides them into individualized learning situations and tasks based on those needs. The educator maintains the learning circle environment and the resources contained within it as well as helping students to connect with opportunities for learning outside of it. The educator manages learning experiences in the sense that he acts as a guide for students as they go about their learning. He will continuously seek new sources of learning materials; books, videos, broadcasts, community events and people, seasonal occurrences, computer software, Internet resources and graphics. He may also develop some of the educational resources that the students will use; audio recordings, video recordings, print materials and graphics.

The educator's role is more than all of the functions listed above. The educator models values and attitudes. The educator counsels and encourages students. The educator is a vital coordinator of educational offerings from everywhere; the local community, the larger community, the electronic community of the Internet, the multicultural offerings of our pluralistic society, the media in all their manifestations and the flora and fauna, the farms and factories that make up the larger physical environment of the students.

The student's role is to become more and more responsible for her own learning. Her quest is to master the skills

necessary to become a self-sufficient learner first in the learning circle itself, and then in the larger society. These skills will be discussed later. The student also is an active member of the learning circle in the sense that she helps in maintaining its environment, helps with decision making and implementing decisions that have been made, and takes part in activities such as the daily check in and weekly progress evaluation sessions.

Other people involved in the learning environment could be adolescent tutors, adult volunteers, and guest animators or speakers. Adolescent volunteers may tutor or animate at certain times in the day. They may do this to earn money, to gain experience, or in exchange for some service.

Adult volunteers may tutor or supervise at certain times in the day. They may support the children's learning in their community by providing transportation and supervision. They may share the lunch hour with students. If they do any of things it will be because they want to be involved in the education of the children in their community.

Guest speakers or animators may come with special offerings, usually at the invitation of the educator, or of the students. Their participation is actively sought and rewarded where possible because they serve the very important function of lessening the isolation of the learning circle from the society of which it is a part.

The secretary should be hired from the immediate neighbourhood of the learning centre. This is to encourage

cooperation between the learning centre and the surrounding neighbourhood. Any janitorial work that needs to be done is shared by members of the learning centre community; educators and students. The learning centre is a real community of people sharing responsibilities and trusting each other.

Parents may take on the roles of adult volunteers, but can also be decision makers. Parents and educators can have monthly progress evaluation sessions or these sessions can be held whenever it is felt necessary, if monthly meetings are too much of a time commitment. Parents can also offer alternative learning programmes using the process described by Corsini (1979) in Chapter six. In this process parents, educators and students write down any specific subject that they would like to either teach or learn, and then the learning centre tries to make a match of interests, goals and schedules.

Another level of involvement for parents is to work together with educators to ensure consistency in terms of behavioural expectations and consequences of inappropriate behaviour for children in the learning circle and at home.

Motivation to Learn in the Circle

Motivation to engage in some kinds of learning is naturally present in children (Brophy, 1987). In the learning circle, the children decide the focus on topics that interest them, or questions that they would like answers to. Learning is based on free choice, genuine interest and curiosity about

the world. Intrinsic motivation to know about the world is thus met and encouraged in this environment. Motivation to meet government requirements with regards to mathematics work, or spelling, or anything else that is not immediately interesting to the student must come from the child's sense of wanting to accomplish on the terms set out by the central authorities, as well as on their own terms. In many learning environments, students can only achieve according to criteria set by others. In this environment, there is a balance between other-directed learning and performance and self-directed learning and performance.

Whenever people are asked to do things that they do not see an immediate value to doing, the carrot and stick approach is used in our society. This is true for toddlers, as well as for active adults and senior citizens. We are all familiar with it. Students should experience success with other-directed activity, as well as they do with self-directed activity. Motivation to do so may come simply from knowing that as soon as the work is done properly, the student will once again be free to work on questions which really intrigue her.

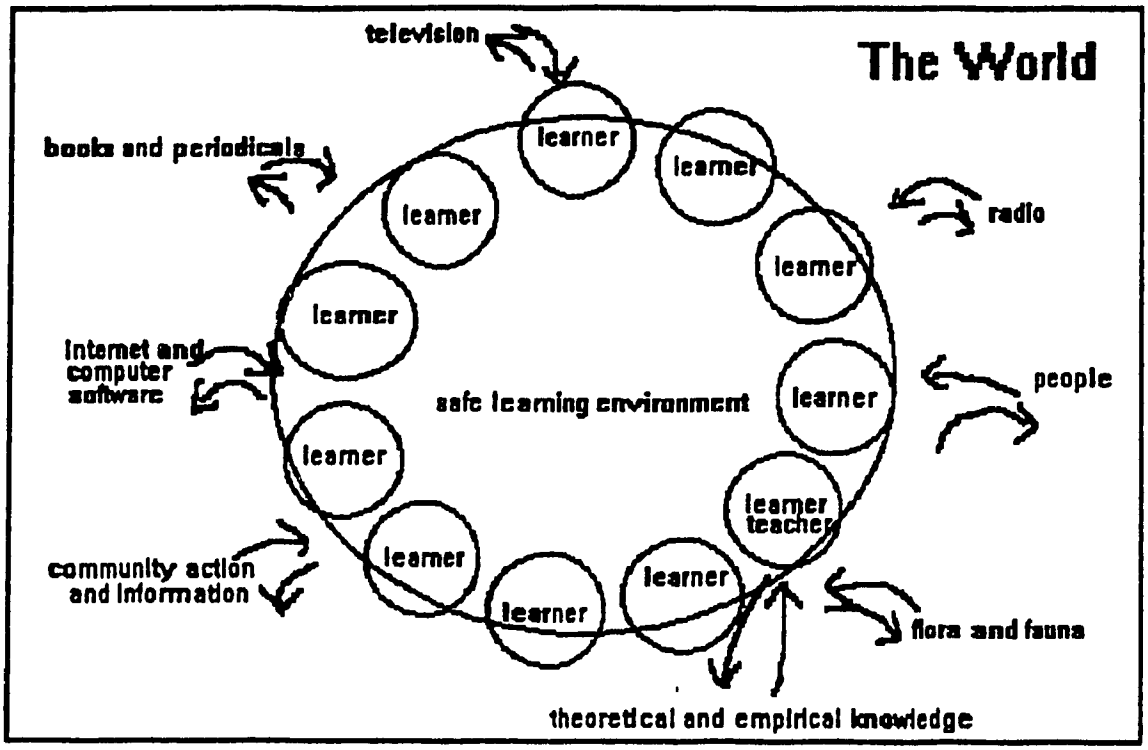
Management of the Learning Circle Environment

Discipline and classroom management are the responsibility of the educator primarily, but the students are involved. Together, students and adults make agreements about reasonable and appropriate behaviour and about consequences of

inappropriate behaviour. When people know what is expected of them and what the limits are, discipline is not often a problem. As well, the small group size in the learning circle and the range of ages make discipline less problematic than in many other learning environments. The importance of whole group involvement in setting rules and agreements governing behaviour cannot be overstated. This encourages all concerned to invest in these rules and agreements. It also empowers all members of the group to take part in creating similar governing structures in future.

Conflicts and situations that bring out strong emotions can be handled respectfully and publicly using the "Talking Stick" process of the Iroquois people. Whoever holds the talking stick does all the talking and they are not to be interrupted until they relinquish the stick. Everyone has an opportunity to hold the talking stick, and to be listened to. However, if they do not want to talk, they simply pass the stick along. Communication is the essence of effective conflict resolution and the talking stick process facilitates true communication to encourage conflict resolution and the airing of strong emotions in an appropriate manner. The talking stick process can also be used for other purposes which will be discussed later.

Figure 2 shows a graphic representation of the learning circle and its correspondence with the world around it.



A Model of the Learning Circle

Figure 2

Technology in the Environment

Just outside of the greater Montreal area, in the farmlands of the St. Lawrence Valley, there is a very old one-room schoolhouse that is still operating. Outside the tiny, traditional schoolhouse building is a big old tree with a tire swing hanging from it. Inside the schoolhouse, along with the tiny desks and chairs of the ten or so elementary students who use the school, are a radio, tape recorders, a television and VCR, three computers with a printer and a modem link to the world.

The proper use of technology in a learning environment allows the learner to take an active role (Fawson and Smellie, 1990). The technology available to students now is powerful

and quite affordable. A radio brings music of all ages and styles, news and commentary and presentations on a wide variety of topics to the students. In Canada, the CBC stereo network and CBC radio network provide wonderful commercial free service. Tape recorders allow students to produce their own sound plays, or "radio plays" for family and community. The tape recorders can also be used by students reading aloud to their families. The taped stories are taken home to be heard by the family later. Some commercially produced lessons, especially language lessons, are also available to be played back on the tape recorders.

A television with the ability to pick up the educational broadcasts of the Public Broadcasting Corporation, or its Canadian equivalent, has a tremendous amount to offer. This can be done through the cable network or with a good antenna or satellite dish. Many PBS stations' school services work with school districts and state education departments on integrating computer and video disc technologies with public television and on introducing new services, like teacher in-service and video conferencing to educators. Several stations and states use broadcast signals to download instructional software to school computers. As well, the stock of educational video programming is being augmented continuously. Learning centres can acquire video tapes for viewing later, or can receive the actual broadcasts. Public television's educational programming, courses and ancillary materials are developed by faculty and teachers, tested with teachers and

students, and reflect some of the best scholarship available (Bodwell, 1988). Television's power to communicate ideas and to bring the world closer to its viewers is well documented. Television is an important technology in the learning circle.

There is an average of one computer for every three students in the learning circle. The computers are used for simulations, problem solving exercises and appropriate educational games. Students can explore various topics through hypertext, whether as readers and explorers or as creators. The computers can be used for drill and practice in a limited way if necessary. This is not usually the best use of a computer by students (Cooper, 1993 and Repman, 1993). The computers are also used for word processing and graphic design of information displays and student authored books, booklets, letters and so on. The computers can be used by the educator or the students to create databases. Using the computer for teaching thinking and problem solving involves seeing the computer as a tool to foster critical thinking (Repman, 1993). Seen in this way, the computer can be a particularly powerful vehicle to facilitate and extend learning.

When a modem link to the Internet or other information networks, like LearningLink or Canada's Schoolnet, is added the computer becomes an even more powerful tool. Students have access to programs like the Writers in Trust program which provides feedback to students on their writing by actual published writers. Students can form pen-pal relationships

with other young people from almost anywhere in the world through the Internet. As well, university and government databases and catalogues become available through the modem. The educator, of course, also has access to information and advice from other educators on the network.

Technologies like the ones discussed here have the power to support students and educators in obtaining, organizing and displaying information. To make best use of the technology available an authentic, challenging task is the starting point. Students choose the topic or question to be addressed and so are likely to see the work done using the technology as worthwhile in its own right. All students, over time, practice advanced skills with the tools available and work takes place in the learning centre's heterogeneous and cooperative environment. The educator acts as a facilitator, introducing new technologies or new uses for a tool as appropriate. Projects take place over extended blocks of time so that the students can fully benefit from working with the tools surrounding them (Means and Olson, 1994).

Curriculum

Curriculum is perhaps the most controversial aspect of any educational environment. The radical reform proposals of the 1960's and many proposals today hinge on control of the curriculum. In Quebec, there is a government mandated curriculum which is complex and complete. Formally, control over curriculum resides firmly in the Ministry of Education.

Broad curriculum guidelines should be state mandated. However, the curriculum guidelines issued by the Ministry are meant to serve as minimum requirements. Considering the ease with which computerized curriculum data bases could be developed and updated, the dream of continuous curriculum development is within reach (Henchey, 1987). The individual learning centres, communicating with the central curriculum development office via modem and computer, could provide feedback to that office and receive updated curricula in return. Many of the objectives for learning outcomes contained within the current curriculum documents are worthy and can be very enjoyable for children. As well, activities and topics of the student's own interest and design can supplement and in many cases meet the requirements of the Ministry's curriculum guidelines.

For example, Ministry guidelines require that elementary students study natural science through observation of and discussion about the plant life that surrounds them. When the learning circle makes full use of its surroundings and the interior of the building is seen as only one place for learning, this curriculum requirement is easily met. The Ministry guidelines require elementary students to compute double digit numbers with practised ease. In the course of organizing and managing a babysitting service for toddlers in the neighbourhood, elementary students would quickly learn to handle such computations.

The Ministry of Education mandates specific learning outcomes, but does not yet concern itself much with the process by which those outcomes are achieved. It is, in many ways, the process which is important rather than the learning outcome (Macdonald-Ross, 1973; Featherstone, 1976; Wang, Haertel and Walberg, 1990; and Kember, 1991). The process selected and used to achieve government mandated learning outcomes can be somewhat child centered and can allow the students to choose their point of focus at any given time.

Whenever the children and educator together choose a topic, task or question deserving of their attention, the educator can match what they are doing with the curriculum guideline objectives through use of a checklist matrix with MEQ objectives listed along the left hand side and students' names listed along the top. In many cases, this should cover it. In the case that a particular objective, or set of objectives, has not, over time, been met through student initiated activity, the educator can explain that this work must be done and that the only question to be answered is how it will be done. Together, students and educator can determine the process that they will use to achieve this end.

The only exception to this is the teaching of basic skills to young students. Basic skills include conversation in the language of instruction, reading, basic numeracy, printing and keyboarding. Before they can converse, read, count, print simple information and keyboard or use a mouse, students are not self-sufficient enough to be able to benefit

from many other activities and resources available within the learning circle. Thus, young children in the circle who cannot do these basic things on their own are tutored by the educator and possibly by an older student as well, until they reach the proficiency necessary for them to take part more fully in other activities.

People feel much more positive about what they are doing when they feel that they have chosen to do it, at least in part. People learn to plan and to follow through on their plans only by doing so. There is a lot of attention being paid now to the idea of learning to learn. Knowing that doing something is the best way to learn how to do it, we can encourage students to structure their own learning more and more, even within the confines of a state-mandated curriculum. In fact, we need the state-mandated curriculum as a guideline for every educator working on his or her own with a group of students. The Quebec elementary curriculum is diverse, life affirming and takes into account very well the concerns and energies of children. The Quebec curriculum offers art, music, dance and drama as well as arithmetic, natural science and language arts. It functions very well as a guide to the variety of topics and skills that children can be introduced to. However, students who feel that they have enough voice, enough trust and respect from the adults around them to choose their focus, their questions and their tasks are students who can truly enjoy learning and be empowered by their learning experiences. That is the true goal of this educational

environment; confident and empowered learners with the skills and attitudes needed to proceed confidently with their lives when they move on to other challenges.

Evaluation of the Learner's Progress

Evaluation of learning is done in a number of ways. Educator observation of learners can generate a good deal of information about learning styles, attitudes and social development (Featherstone, 1976). When there are no more than sixteen students in the care of an educator, observation becomes a very feasible way to monitor learners' progress. Observations can be noted or recorded on a checklist of target behaviours and become part of the learner profile that is created for each student.

Learner self-assessment can be used as another evaluation tool. This is a valuable method of evaluation in terms of the skills of self-evaluation that the learner can practice while going through this process. The self-assessment is done during a one-to-one interview with the educator. The educator and the learner together discuss progress, strengths and weaknesses, and targets for the future. They can also discuss the strengths and weaknesses of the educator's work. These progress interviews can take place whenever necessary, and usually every month or so. As well, when learners work together in cooperative groups, especially on long term challenging projects, they can take part in group assessments with the educator acting as a facilitator. Using the talking

stick process to facilitate, group members and the educator can discuss group process, the group's ability to function well as a team, individual strengths and weaknesses within the context of the project and the project's overall success in terms of achieving the goals set initially. The educator sitting in on the group session can record the proceedings and add any relevant information to the learner profiles.

The learner can request a test to determine his performance of a skill or his ability to recall certain information. Students like to know concretely what they can do, and when tests are requested, it means that the student is ready for them. Teacher mandated tests create anxiety in the learners (Paris et al, 1991). The harm of introducing anxiety to the learning environment far outweighs the benefits of test results since, as Kass and Fish (1991) argue, test anxiety creates problems with potentially serious implications for children's ability to learn. When the student requests the test, there may be some nervousness, but the student is in control of the testing process and feels ready to take on the challenge.

At any point in the year, the student may wish to take the Canadian Test of Basic Skills to determine her reading level, level of math skills and other levels in comparison with the average Canadian student of her age. She should not take the Test of Basic Skills more than once every calendar year, but can request it when she is ready. The results will be the topic of a very important educator-student interview

and will help in goal setting and diagnosis of any learning problems or confusions that need to be addressed. There is little doubt that, when offered the Test of Basic Skills with a clear explanation of what it is and what it can provide in terms of information, students will want very much to take the test. This is because most children are concerned with their progress and want to know how they are doing relative to their peers.

A word needs to be said here about remediation and individualized instruction. Since learning is self-directed much of the time, and the educator works with students individually to address their needs and areas of weakness, learning in this environment is individualized. Learners work from a level at which they are comfortable, to new challenges when they are ready. The educator may introduce a new skill or challenge in his role as guide and tutor. If a learner finds certain activities difficult, or is seen to be functioning below the level of most students her age, based on results of the test of basic skills, then she and the educator can work remedially to improve skills. Remediation, enrichment and indeed all tailoring of school experience to the learner's needs is facilitated by the learning circle's emphasis on small groups, self-directed activity and tutoring.

The educator has a model of each learner, an understanding of the learner, in the form of a learner profile, a collection of records of the learner's achievements and activities in the learning circle. The learner profile of

each student can be computerized and contains the records of educator observation, student self-assessment and group self-assessment as has been described. It also contains a record of the activities that the student has engaged in and enjoyed, and of the student's accomplishments. The learner profile becomes a report to the parents every two or three months and can also contain records of parents' meetings with the educator.

Apart from the student's learner profile, there is also a portfolio kept by each student. Within are contained reports by the student on the projects he has completed. These can be elaborate and include photographs, drawings, or any other record of the success of the project. The portfolio also contains a selection of creative work. This can be written work, artwork, photography, musical compositions, audio tapes, video tapes and anything else that the student has produced. The portfolio can be as large as there is space for it, in terms of storage and practicality.

Feedback to the System

To be viable as a system, the learning circle must be organized for self-evaluation, self-regulation and control of its processes. The variety inherent in the community must be met with variety in the system which serves it. First, the educator has the professional responsibility and authority to respond to the learning needs of students. These needs are made apparent through such processes as the talking stick

daily check in, simple daily observation and the evaluation of students using the variety of methods which have been described.

Monitoring of comments made and thoughts expressed during the daily check in with talking stick is a valuable practice with feedback benefits. Check in usually takes about one minute per person. So a check in for fifteen people would take from ten to twenty minutes on average. This is time well spent. When people are free to talk for as long as they wish, knowing that no interruption will be tolerated, comments are often thoughtful, insightful and telling.

As well, observation of the learning circle as a dynamic system in action can provide feedback as to the prevalent atmosphere. Evaluation of students, especially self-evaluation, can provide feedback about levels of intrinsic motivation, enthusiasm and application of previous learning. Use of a measurement tool like the Canadian Test of Basic Skills can provide essential feedback about students' progress in development of skills. Monitoring of students' portfolios provides feedback about students' interests, abilities and levels of activity. Finally, meetings with parents and prospective parents provides information about their concerns about the schooling that their children will receive and about the learning environment itself.

The educator is the system's keeper. Part of the educator's role is that of monitor and evaluator of the system's health and ability to meet its goals. Indeed, its

goals can change over time, depending on changes in the community surrounding it and changes in its student population. The educators of a learning centre should collaboratively produce an evaluation of the system, based on feedback from the sources mentioned above, every six months.

Systemic Adaptation and Self-Regulation

The tools and strategies available to meet students' needs are to be found in the wide variety of learning materials and instructional techniques that are easily found in the professional literature and through school suppliers. The educator thus has an obligation to keep pace with developments in the field of education through subscription to professional journals and through networking with other educators. These professional development activities can be facilitated by the local school board or teacher's union office. This professional development activity is an important aspect of the system's self-regulation and adaptability.

As well, the learning centre, through its learning circle, has a mandate to meet some of the educational needs of the community in which it finds itself. These needs can be determined in part through interviews and discussions with parents and prospective parents as has been suggested. However, assessment of the community's needs will also require meetings with other members of the community and observation of events in the community environment surrounding the

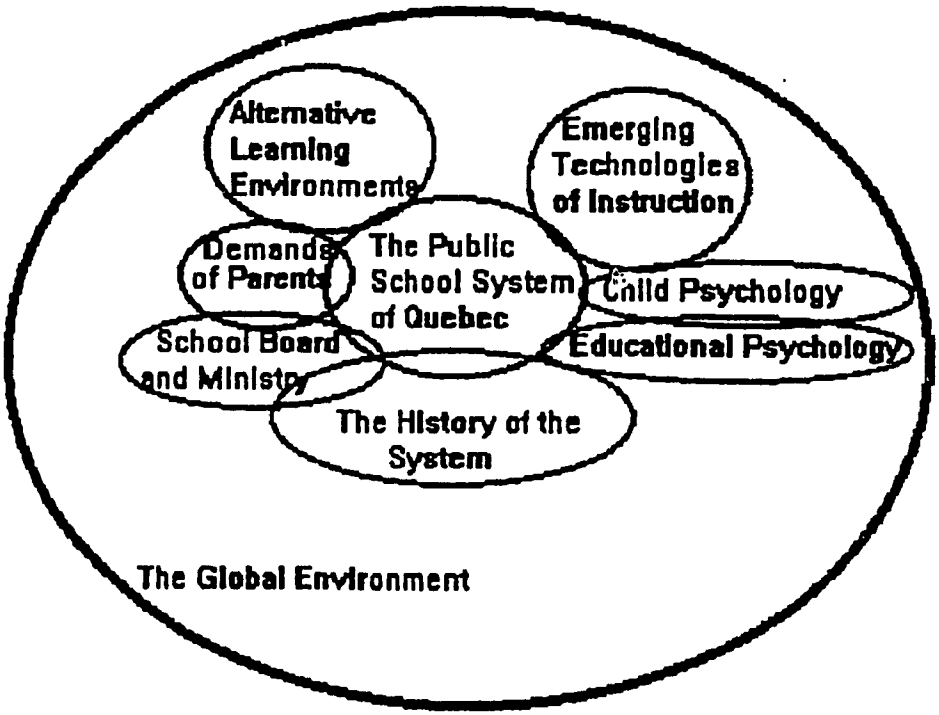
learning centre. Also, in order for the learning centre to be a fully viable system there must be a mechanism for forecasting changes in the student population, and changing community needs. This might best be accomplished through a formal process by the educators, once a year, of comparison between the characteristics of present students and former students, and between present feedback from the community and feedback recorded in previous years. In this way, trends become more noticeable and further change in any one direction can be forecast.

The Learning Environment as Part of a Larger System

The learning circle operates as a system of systems within larger systems. Graphic #1 illustrates this relationship. The learner herself is a system, as are other elements of the learning circle. The learning circle is a system dedicated to the encouragement of learning within and without its boundaries. It exists within the larger system of the learning centre. The learning centre is a system the purpose of which is to facilitate the functioning of individual learning circles.

The learning centre operates within the larger system of the district, within which there are many other learning centres, all represented by the school board. The school board is a system with the purpose of enabling all those within its geographic boundaries to achieve their learning goals.

The school board functions within the larger system of the province, or state. This political system is represented by the state ministry of education. This larger system supervises, funds and facilitates the work of all of the systems contained within it. Finally, the environment surrounding the whole system of systems must also be taken into account. Figure 3 is a graphic representation of this idea.



The System With and Within Other Systems

Figure 3

The learning environment's relationship to the larger systems surrounding it should involve an optimal level of direct contact. The centre has to interact with many elements of the larger school system and its environment. Parents and other community members communicate directly with the learning circle. Their participation is encouraged and sometimes, as with concerns about a learner's behaviour, it is required. As well, the learning centre should interact with other centres, the district school board, the teachers' union or other association, the parents' association if there is one, and the provincial authority for schooling. Each system interacts more or less effectively with the people and organizations surrounding it. Communication is essential and direct communication is preferable to go-betweens.

Relationships Between Systems

Computers linked through modems can do a lot to facilitate communication between these elements of the larger system. Centres can link with each other through an electronic billboard and through electronic mail. By doing so, they ensure that students can benefit from meeting others in their area and can enjoy activities that work best when many take part. Examples of such activities are; science fairs, walk-a-thons for charity, choirs and music groups, team sports and leagues to play in, and drama productions. Educators can arrange events for students together, with

student input as to what should be arranged. Older students can also plan and organize such events.

Through electronic mail and bulletin boards, educators can also share information with each other, or collaboratively organize professional development. Each centre has between two and five educators, so professionals from a number of centres together represent a lot of experience and ability.

Electronic mail and billboard use is so easy and immediate that communication becomes virtually problem free. One of the most difficult things to do in our current system is for two teachers to reach each other by telephone at work. Electronic mail does not require the presence of the other person at the same point in time, yet it is quicker and cheaper than regular mail. Educators can communicate with parents using electronic mail as well, as long as parents have computers with modems.

The role of school principal is assumed, on a rotating basis, by one of the educators who work in the learning centre. This person will be called the centre's current leader. This is done so that the non-hierarchic structure present in the learning circle is mirrored in the immediate environment of the learning centre. The centre's current leader is responsible for much of the communication that goes on between the centre and other centres and organizations. This role is a demanding and time consuming one and so the person assuming this role is rewarded accordingly. The school

secretary also helps with communication between the centre and other systems.

The teachers' union can communicate with each centre directly through whatever means are available. A parent association is more likely to work through the school board, especially given the small size of each learning centre and the voice given to parents in decision-making there. The parent association can offer help to parents in their role of decision maker in the learning centre. It can also offer help, along with the school board, in gathering information about the workings of each learning centre so that parents can make informed choices as to where to place their children. This information can be provided to the school boards and parents from educators based on their own assessments of their system's health and ability to provide an excellent learning environment to children.

The local school board should also be linked to the centre by computer. The school board is responsible for overseeing and facilitating the work of the centre. The board can provide resources and services to educators to encourage professional development. These can be announced through the computer-modem link. School boards can, as they do now, provide expert consultants to offer support to educators in specific subject areas like French as a second language, art, science, or drama.

This is very close to Montreal's current situation. School boards have a variety of schooling environments to

offer parents and children, although they are all classroom environments. They differ in terms of emphasis, or atmosphere. The board provides support in the form of funding, expert consultants and materials. The board can also provide services to students that the learning centres do not provide; swimming lessons for example. The school board can also visit learning centres to oversee their activities and help with evaluation of the system's functioning.

Learning Centre Size

With communication and transportation technologies as sophisticated as they currently are, learning centres can be many and varied within a school district. Instead of there being ten schools with two or three hundred children in each, there can be between fifty and seventy-five learning centres with twenty to fifty children in each. As long ago as 1979, there was considerable evidence that smaller schools had fewer discipline problems, less violence and vandalism, and less absence and truancy than larger schools. This was true whether the schools were traditional or any other type (Smith, 1979). As well, this small size for learning centres ensures that learners and educators are able to form meaningful relationships. Such relationships in turn help children to become principled and well rounded by providing role models and instilling values. The small size of learning circles and learning centres goes some way to counter the loss of community and family values in our society.

Centres can be housed in existing school buildings, but these buildings were designed to hold many students at a time; thus the noise problem arises and children suffer through being forced into silence, or near silence, for most of their working day. Learning centres would be better spaced throughout a school district in houses or buildings about the size of a large house so that the true benefits of small student groupings can be realized.

The Learning Centre and the State

The learning centre can communicate directly with the central authorities through electronic mail. This is already being done in schools throughout Quebec. This communication is handled by the learning centre's current leader, and by its secretary. The central authorities provide curricular guidelines and support documents. They also provide funding for the learning centre's operation on a per student basis. This funding may go through the district school board, or may be direct.

Currently, in Quebec, schools are given an average of about 4300 dollars per regular student registered per year. By regular student is meant a student with no handicap or special needs. Funding for students with special needs is much higher, sometimes more than doubled. (These figures were obtained through conversations with budget offices of three Montreal area school boards in 1994 and 1995.) Thus, the

learning circle could receive about 43,000 dollars per year for ten students.

The ideal ratio of ten to sixteen students per educator and per learning circle is difficult to realize; careful budgeting by learning centre staff is crucial. Obviously, if special needs students form part of the student population, extra funding to meet their needs is provided and the ratio of students to educator can fall. The funding per child covers operating costs, like heating and electricity, and acquisition costs as the educator tries to keep abreast of technological and publishing developments. Every year, optimally, some new piece of equipment and some computer software should be acquired, as well as new print materials and graphics. There are also supplies of art and craft materials and notebooks to be purchased. These need not be costly to be fully adequate.

The educator's salary and salaries for the acting centre leader, the secretary and other educators like French specialists, should also come out of the budget of 4300 dollars per child. Accordingly, as the educator feels a need for more income, she can take on more students. However, she can not exceed the ratio of 16 students per educator since this would compromise the quality of guidance and support that her learning circle members receive.

Since the learning centre is funded by the central authorities, and ultimately by the tax payers, accountability must be organized by the system. Accountability is provided in three ways. First, parents receive reports on their

children's accomplishments five times in the school year as is currently the case in Quebec. These reports, based on learner profiles, can be very detailed and informative. Second, the district school board oversees a centre's functioning through occasional visits and regular communication. Third, the learning centre reports fulfilment of state curriculum objectives for learning outcomes and results of the Canadian Tests of Basic Skills on a yearly basis, as well as reporting on the system's health and functioning every six months. Learning centres, and the learning circles within them, are thus held accountable for the service they provide to the learners in a community.

A last word about funding concerns students' money-making activities within the learning centre. Students, depending on whether they live in a rural or an urban setting, can raise rabbits or chickens, organize a toddlers' play group, run a car wash, or organize any number of other small business ventures to augment the available funds of the centre. The students, educators and parents can decide together how these funds will be spent. These kinds of activities help children to acquire habits of responsibility and entrepreneurship, facility with numbers, ability to plan and follow through, to work together and to deal with the public. Most importantly, these activities allow students to feel pride in themselves as contributing members of the community.

Decision Making in the Learning Centre

Decisions that involve expanding or contracting the system's time and space boundaries are made collectively by the educators and a parents' committee. Examples of such decisions include the need for new flooring, offering a new service like day care provision until 6:00 pm, opening the centre through the month of August, or changing the centre's staff size. There can be approximately one parent representative for every ten children enrolled at the centre. The ratio of parents to educators at school meetings will then be approximately one to one. Older students can also be represented if parents and educators agree on their inclusion. Decisions are made by consensus whenever possible, with one vote per person in the event that consensus cannot be reached on an issue. Educators and parents can easily be trained in group process roles; facilitator, time keeper, secretary and mood watcher when emotions become strong. These roles can be shared on a rotational basis.

The agenda for any given meeting can be posted electronically and physically one or two weeks beforehand to allow people to consider the issues and to write and post opinion papers should they feel it necessary. Meetings can be held when decision makers feel that it is necessary.

Decisions about how a specific learning circle will be organized or about problems within the circle are made by the educator and learners comprising that circle. Again, the same group process, with the addition of the talking stick method,

can be used. Posting an agenda and soliciting opinion papers is a very good way to teach children how to write persuasively and how to consider a number of alternative solutions to a problem.

Decisions about hiring, acquisitions and supplies are made by the educators of the centre together. When considering hiring new staff they may need to consult with their local school board. They can meet biweekly, or whenever they feel it necessary. The centre's current leader oversees dispensation of funds, making sure that the bills are paid and the budget is followed. If there is a conflict between educators, or frequent complaints from learners or parents about an educator, the centre's leader can call for the help of the teachers' union to settle the problem. The teachers' union can provide an unbiased observer and facilitator to address the situation.

Figure 4 shows the defining characteristics of the learning circle environment and their purpose.

The Learning Circle as a Functioning System

In order to be able to envision this model of a learning environment, it is helpful to imagine a typical day of its operation. One of the most important aspects of the model is its allowance of spontaneity on the part of individual members of the learning circle and of the group as a whole. Consider the following day in the life of a learning circle of twelve students ranging from grade three level to grade six level.

The Learning Circle at a Glance

Defining Characteristics	Design Purpose/Need Addressed
low numbers of learners per learning cirlce	allowance of learners' self-expression, personalized guidance, consensus decisions
low learner/educator ratio and long term grouping of learners and educators	development of trust, genuine caring, true understanding of each learner
learner directed learning	development of ability to make choices, of autonomy and of love of learning and thinking
encouragement of active learning	preparation for life-long learning, uses learner's love of action, builds self-esteem
appropriate use of technology	provides more communication options, familiarizes learners with technological development
feedback sought and forecasting formalized	provision of an adaptive, self-correcting, viable system
fulfillment of state curriculum requirements	provision of uniformity within diversity and assurance of maintenance of standards
encouragement of community and parental involvement	development of community support for learners, variety of local role models,

Figure 4

It is January and the weather is unseasonably warm and humid. The day begins with the arrival of the circle's educator and a couple of early students. Students arrive between the hours of eight o'clock and half past nine. The only penalty for lateness is that a student might miss a group decision or a group activity. This morning, members of the group begin the day by chatting among themselves, reading, discussing the weather and considering a suggestion of going out to experience it more fully.

In the last week or so, the circle has been in the process of preparing for an open house exhibit of works. Projects have been reaching completion, art work has been carefully completed, critiqued and selected, and then mounted. Written work and a hypertext presentation have been nearing completion also. Students begin to move toward some of these projects and activities as they await the arrival of latecomers.

By half past nine, everyone is present and the check-in can begin. The group gathers to sit in a circle and the talking stick is used so that everyone has uninterrupted time to check-in by telling something about their mood, their plans for the day and anything they think needs to be known by the group. During check-in the educator expresses her love of mists and fog, which on this day are beautiful and mysterious. She suggests that the group take advantage of the strange weather by going out for a walk. One of the students has been managing the preparations for the open house by using a

project management application on his father's computer at home. He is consulted and agrees that according to his understanding of the critical path of the preparations, the group can afford an hour or two to explore the weather.

The whole group sets out for a walk in the suburban neighbourhood of which they are a part. They enjoy the fog and discover that it is thicker in some places than in others and that it tends to dissipate as the hours pass. One student is very taken with how the fog comes about and decides to find out more about it by talking to someone who knows. She convinces another student to work with her on this. The educator suggests that the two of them might prepare a brief report to the rest of the group explaining the phenomenon once they understand it themselves.

When they return to the learning centre, the two student researchers call the local weather station and talk briefly to a meteorologist there. They also find a book in the centre's library about weather. Later, they look in the computerized encyclopedia for more information. Another student who loves artistic activity decides to portray the mist and icy trees in a painting. She is inspired by what she has seen outside. Others write in their journals briefly about the morning walk, then proceed to work on further preparations for the open house. One decides to write a mystery story that will take place in foggy weather and proceeds to make notes about the plot and characters. The educator does reading practice with two students for about twenty minutes. These two students are

weak in their decoding skills and reading comprehension. The educator then calls another student over to do reading work with her, again for about twenty minutes. This student is at a grade three level and needs help with decoding longer words and building vocabulary.

All of the students together have created a dictionary on computer using a word processing program. Definitions are in the students' own words and a word search function which is part of the word processor can "look up" a word in seconds for a student. This dictionary, as well as other dictionaries, is consulted quite frequently.

By now it is almost time for lunch. The learning centre is equipped with a microwave oven, a small stove top and a refrigerator. Students take turns preparing soup for lunch and clearing up after lunch. Now, two students go off to prepare the soup for today and the rest begin to wind up their activities and take out their lunches. Everyone eats together. Sandwiches and fruit are brought from home, but the soup is provided by the centre and is shared by all. After lunch, students often go outside to get some fresh air, but since they were out for a long time in the morning and it is now raining, they all play games inside for about half an hour instead.

Now it is one o'clock. The whole group has French instruction for about forty-five minutes or an hour. This entails the arrival of another educator, a francophone. She is also helping the students to prepare for the open house.

These students have pen-pals in France whom they contact through the Internet via modem. They have put together a short play in French which they wrote together and which they hope to video tape and send off to their pen-pals in France. The video tape will also be shown at the open house, if it is ready in time.

For most of the French lesson, the students work at video taping their production. They are working on the last few minutes of the play. They finish with about fifteen minutes to spare. They sit in a circle and discuss, in French, their feelings about finishing the video and their experience of working as a group on this particular project. One student who has had access to a video camera for most of his short life, has tended to dominate the proceedings. This is discussed and talking stick is used so that everyone has a chance to speak.

At two o'clock, the French educator leaves to work with another learning circle at the centre, and the students separate to work on further open house preparations, artwork, math work, journal writing, computer work, or weather analysis. The students know that they are responsible for progressing through a certain number of journal entries, math book pages, spelling and vocabulary assignments and reading assignments each week. For the most part, this work is done by the student's own initiative. If a student is lagging behind in her work, the educator will intervene. As well, if a student has any question about his work, the educator is

available to explain, illustrate and advise. Often, an older student will explain a math procedure or spelling rule to a younger student.

These activities continue for the next two hours or so. As well, students and the educator take turns performing clean-up duties such as watering plants, feeding bunny rabbits, sweeping, mopping and dusting. Students who have a parent at home leave at about three o'clock. Those with working parents stay longer. The centre is open until half past five. The day ends for the learning circle when the last person leaves. The educators at the learning centre may take turns staying late, since the number of students steadily decreases as the time passes after three o'clock.

Challenges to Implementing This Design

Romiszowksi (1981) identifies potential problems for instructional designers working to implement a system of instruction. Noting these and discussing possible ways of avoiding them or of solving them makes successful implementation of the design more probable.

First, it can be kept in mind that each stage of a project to implement a design should have its own evaluation, approval and feedback provision. The implementation of the design should be well controlled. The system is untried and must be tested and revised as necessary throughout implementation. As well, the system requires a self-control mechanism. The learning circle system includes in its design

the ability to self-evaluate and self-regulate through regular feedback from a variety of sources.

Romiszowski (1981) identifies a potential problem for implementation that seems to apply especially to this design. The problem stems from a lack of experience in using the model of teaching and learning included in the design. The model itself may be adequate, but those implementing the system may not have a complete understanding or appreciation for it. In order to avoid this problem, the design must be implemented carefully by professionals who are dedicated to its underlying philosophy. It may also be necessary to orient, inform and train the people involved in implementing the design at every stage. That is to say, even if the design is being implemented for the fifteenth time, the people involved in that implementation need to fully understand the design itself.

An obvious problem in implementation is a lack of material resources. This problem can only be avoided through the acquisition of government support and funding for the design as well as support from parents and school board trustees. A problem that is closely related to funding is that of potential conflict between the learning circle system and the super-system of the provincial public school system that it proposes to function within. Flexibility and adaptability on the part of the design and its implementers may help with such a problem. As well, efficient and open

lines of communication may prove essential between all those involved in the learning circle and its super-system.

Overall, throughout the long process of full implementation, many potential problems or conflicts may be identified. Attempts can be made to avoid them or to minimize them through the generation and selection of alternative strategies. Those that cannot be avoided can at least be documented so that the people implementing the project can remain aware of them (Romiszowski, 1981).

The Learning Centre as One Viable Alternative

The learning centre is a collection of different learning environments, defined by the adults and children involved in them daily. This vision of a collectively run learning organization, with little or no hierarchy and with as much community involvement as possible, is only one vision of an excellent learning environment. There are probably as many such visions as there are teaching styles, learning styles and clothing styles. When alternatives find encouragement in the larger schooling system of which they seek to be a part, and when parents and learners have genuine choice about which alternative learning environment they would like to attend, this vision and many others can become reality.

The state authority, usually a ministry of education, remains as guardian of standards and of minimum curricular requirements. The school boards remain as coordinators, facilitators, overseers and providers of services to the

learning centres and schools and to the parents and children served by them. Some schools might remain as they are now, be they authoritarian, science and technology based, or focused on the fine arts. Some schools might disintegrate and reform as smaller units. Some might take on a form very similar to the one described here.

Educators and administrators of educational establishments, including the professionals at the school boards, are fully accountable to the parents and children to whom they wish to provide educational services. If a learning environment does not provide adequate educational services to its clientele, it must either adapt and improve its learning environment, or close its doors through lack of support from its community.

The educational system of variety, of well developed and equally funded alternatives, of choice for all concerned, is a system that can meet the needs of its increasingly varied clientele and that can meet the challenges of the future through continuous adaptation, research and development.

CHAPTER EIGHT

Responses From the Community

Introduction

In order to acquire an understanding of possible reactions to this system design, the actual design comprising the text of chapter seven, was presented to ten parents, teachers and school board trustees in the Montreal area. Five questions were asked and many responded in writing of some length. Although few people were involved in this field work, they represent Quebec English-speaking parents, teachers and trustees. The idea was not to conduct a survey with a large sample of people so that statistical analysis could be carried out. Instead, the aim here was to have a panel of informed people judge it to get some sense of the kind of support, or lack thereof, with which a design like this one would be greeted by the people of Quebec.

The questionnaire is included in appendix A. Briefly, the questions asked are as follows. First, what is missing from this description? Second, as a parent, would you be willing to enrol your child in a learning circle environment such as the one described? What modifications would you like to see to the learning circle, or what concerns would you have with it, as a parent? Fourth, as a teacher, would you be willing to teach in a learning circle environment such as the one described? As a teacher in such an environment, how would you like it to be modified, or what concerns would you have?

Ten people responded to these questions after reading the text of chapter seven describing the design.

Enthusiasm for the Design

One parent echoed the philosophical basis for this design when she wrote, "education should...support the child's instinctive need to know, explore and understand as well as acquire skills." Another respondent noted that the curriculum would be created by the learners and the educator. She wrote, "I like the idea of the learning centre being open to the community". She also expressed appreciation for the inclusion of self-evaluation and the learners' asking for testing in the design. She wrote that the learning circle seems to have "the feel of a family unit". This aspect of the design is an attempt to provide children with that "feel" in a society that includes many dysfunctional families.

Another parent wrote, "Sounds very nurturing and loving - which to me is crucial, especially the family-type atmosphere". She also expressed appreciation for the inclusion of community involvement, and the basic philosophy of teaching children to learn. She wrote, "...it's great, especially since our society and technologies evolve so quickly and there's no way any place can cover all the basics..." She "liked the process philosophy over the results-oriented philosophy".

An elementary grades teacher wrote that she loved the talking stick method and the idea of having a personalized

dictionary system on the computer. Another teacher liked "the emphasis on modern technology and the idea that students are more responsible for their own learning". He also wrote, "As someone involved in the Arts I find this type of learning environment conducive to the creative process".

One parent expressed appreciation for the "shared-rule setting" and the natural development of curiosity. She felt that the "present school system is damaging".

A commissioner for a large school board expressed her liking for the design and felt that it might be possible to organize an existing school into learning circle groups in parents' homes for part of the school week. Her opinion was that this new method of teaching and learning may be excellent, but will challenge existing methods, approaches and bureaucracy. She concluded that the learning circle environment might be kinder for young children than current approaches. She expressed encouragement for the implementation of the learning circle design.

What is Missing From the Design Description?

The first question asked what is missing from the description. Respondents' answers to this question are discussed here. As well, a reaction to responses is provided. Some information is presented in the design description, and some would be included in later documents were the learning centre design to be implemented.

A Clear Role for Parents One respondent expressed the need for a clearly defined role for parents.

In revising the design description, the following would be included. Parents, in order to become partners in the learning centre, would first have to understand the centre's philosophy and focus. To enrol a child in a specific learning environment, a parent understands and approves the philosophy behind the environment and the processes and activities by which it is maintained.

Parents are invited to meet and to select representatives to attend learning centre meetings. There should be approximately one parent representative for every ten families. Parent representatives meet with learning centre educators to discuss decisions affecting the centre's time and space boundaries; the use of its facilities and expansion or contraction of its hours of operation.

Parents of a learner also meet with the educator whenever this seems necessary to discuss the learner's progress, strengths, weaknesses, interests, talents and portfolio. The child, the parent and the educator together continually determine the direction of learning activities. The learner's behaviour is also discussed and together, parents and educator can arrive at a strategy for minimizing anti-social or disturbing behaviour both at the centre and at home.

A final role for parents is the role of volunteer, whether in the learning circle, on a field excursion organized by the parent or by someone else, or as a fund raiser. A

parent can offer expertise, enthusiasm, ideas or old clothes for trunk theatre games. There are no real limits to the level of involvement that a parent can assume. Any problems concerning parent involvement; personality conflicts, misunderstanding of the centre's policies and philosophy; can be dealt with by the centre's acting principal, or another staff member using mediation techniques and the talking stick. Parents are members of the learning centre community and are treated as such.

Balance of Roles One respondent felt the need for a clearer statement about the balance of teaching and learning in the system. She felt that it should be made clear that "both aspects are expanded, enriched and flexible". This respondent also expressed a need for some discussion of improving the child's "preparedness" for learning. This preparedness involves nutrition, spiritual well-being, and emotional stability. She asked how the learning circle would help with these aspects of the child's functioning.

This question is answered in part by the design description. The child's emotional stability is explored and noted during morning check-in with the talking stick. Nutrition and spiritual well-being would have to be addressed in more detail in a revision of the design description.

Space Allocation The same respondent expressed a need for specific information about ideal space allocation.

A floor plan for ideal space allocation and utilization would be necessary in order to create a functioning learning centre.

Cooperative Efforts of the Learning Centre Community This respondent also asked for specific cooperative projects for all members of the learning centre community.

These projects would be valuable for many reasons. Specific ideas for projects would arise when circumstances required them. Parents, learners and educators together could brainstorm ideas for community projects as well.

Affect on Teachers Another respondent wanted more information about how this design would affect teachers.

In revising the design description, the following would be included. If teachers choose to become involved in a learning centre, they would be expected to take on the roles outlined in the design description. Specialist teachers, such as teachers of French as a second language, or of physical education, would circulate among a few learning centres, just as they now work with many classes in a school. Teachers would have more allowance of spontaneity, and more responsibility to go with it. Teachers would earn substantially less than do those who teach more students at a time.

MEQ Requirements A respondent expressed a need for more specific information about the balance between self-directed learning and Ministry of Education requirements. There was also a question as to how the basic skills would be learned in the circle.

These are addressed below in the discussion of teachers' concerns and in the description of the learning circle design of chapter seven.

Comparison With the Existing System One respondent requested a more specific comparison with the existing system. This is done throughout chapters two to seven. These earlier chapters were not read by respondents.

Children's Motivation to Learn It was felt that one could say more about children's motivation to learn.

This is done in earlier chapters.

Keeping Pace with Technology There was also a request for more discussion on keeping pace with changing technologies.

In the description of the system, the use of existing technologies is discussed. To further clarify, one can add that new technologies must first be evaluated as to their worth and utility in a learning environment. If they prove useful, they can be acquired and integrated into the learning circle environment. The budget must allow for acquisition of hardware and software, as has been mentioned in chapter seven.

Need for a Budget Four respondents expressed a need for a budget to show approximate expenses and how they would be met.

A budget would be the logical next step to implementing the design of the learning circle system. It would go a long way to answering questions of feasibility.

Clarifying Time Management It was felt by one respondent, a teacher, that the design required the inclusion of a time management system for both educators and learners.

This would be a valuable addition to the design since a time management tool would be needed in such a system. Generally, in terms of time use it can be added that learners in the circle spend the majority of their time in active learning; reading, writing, talking, exploring in a hands-on way and receiving tutoring in specific areas. The educator divides the time available between observation, assessment and diagnosis, guidance and management, and individualized instruction. The activities of a learning circle educator in the time available would be very similar to those of a teacher in a British open classroom.

Scheduling with Specialist Teachers A request was made about specific scheduling of French instruction.

This scheduling would also be a further step in implementing the design.

Concern with Educator's Role One respondent felt a need for more information about dealing with an educator who does not fulfil the role required, and about dealing with educator burn out.

It was mentioned in the description that the school board would monitor and supervise the learning circle. School board observers would likely be able to notice educator burn out. Parents being welcome in the learning circle and meeting with the educator could also make judgements about how well an educator was fulfilling the role. Since the learning circle system is envisioned as being part of a system of choice, a parent who felt that an educator did not meet the child's needs could remove the child from the circle. The learning centre staff and especially the principal could also observe and intervene to improve the situation.

Meeting Special Needs A question was raised as to whether learners with special needs would be separated or integrated in the learning circle system.

The issue of meeting a variety of needs is discussed more fully below, but these learners would be integrated fully as long as learners with behavioural problems, such as Attention Deficit Disorder (ADD), did not interfere with the learning of other members of the circle.

The Question of Curriculum Finally, one respondent expressed the need to know more fully what would be taught. She felt that this was not made clear.

When children base their learning on personal interest, curiosity, serendipity and other unpredictable factors, one cannot clearly say what will be taught. What can be said is that children will be taught basic skills, which have been listed elsewhere, and enabling skills; these include learning

strategies, research strategies and meta-cognitive strategies. The revised design description should make clear that the goal of the learning circle system is to encourage and enable children to become confident, self-motivated and responsible learners and members of the community.

Categorical Responses

Two questions asked for the respondent to choose from four possible responses. These were the questions asking about willingness to enroll a child or teach in such an environment. The responses available were; yes, I would like that very much; yes, but with some concerns and caution; no, not unless the learning circle was modified; and, no, not at all. All ten respondents felt that they would like to see their child in such an environment for learning (See figure 5). Eight of the ten respondents, all of whom are parents, chose the second response to the question as to whether they would wish to enroll a child in such a learning circle. They responded that yes, they would like to do so, but with some concerns and caution. Most then elaborated on their concerns in the space provided. The two responses which differed were an unqualified yes.

Categorical Responses to the Evaluative Questionnaire

	Would you enrol child?				Would you teach?			
Respondents	yes!	yes..	no...	no!	yes!	yes..	no...	no!
parent		X						
parent	X				X			
parent		X			X			
parent - Chair school comm.		X						
parent/ teacher		X				X		
parent/ teacher		X				X		
parent/ teacher		X				X		
parent/ teacher	X				X			
parent/ board trustee		X					X	
parent/ board trustee		X				X		

Figure 5

Concerns of Parents

Concerns expressed by parents about enroling children in such an environment are presented here. Some of these concerns are addressed in the design description, but perhaps not completely enough to meet a parent's concerns.

Intercircle Interaction One parent expressed a need for more intercircle interaction.

It was explained in the design description that such interaction would be arranged. There was also a concern about lack of services and extra-curricular activities available because of the small size of the learning centre. Again, services now available through schools and school boards could still be available through school boards or through a number of learning centres coming together for certain activities.

Physical Education This parent also wondered about a physical education programme.

Such a programme could be offered by the school board to students from a number of learning centres in any given neighbourhood. The students would gather at the neighbourhood gymnasium for the physical education programme.

Misappropriation of Funds A parent also expressed a concern about the danger of misappropriation of funds by teachers acting as centre principals.

This danger could be avoided by strict controls and a system of bookkeeping open to all staff, or by doing all purchasing and payments through the school board. The problem with the second solution is that it centralizes control of

funds, taking control away from the learning centre and giving it back to the school board.

Learning Circle Demographics Another parent expressed concern about the demographics of any given learning circle. Would there be a fifty/fifty split between males and females?

This is a good question. Learning circle student populations can mirror the populations of children of elementary school age in their surrounding communities. However, since each different learning circle would have a different atmosphere depending on its educator and his or her teaching style and personality, some circles could be more attractive to girls than to boys, or vice versa. This could also affect the boy/girl ratio.

Meeting Special Needs Three parents expressed concern about the ability of the learning circle environment to meet the needs of gifted, regular and learning disabled students.

The learning circle environment can be very well suited to meeting the needs of a variety of students. A revision of the design description would include the following clarification. Student to educator ratios are low in the learning circle model, and students with special needs receive extra funding as well, which could further reduce the ratio of students to educators. As well, students learn at their own pace in the learning circle model. This allows gifted children to pursue their interests and to challenge themselves as much as they are able. They can also be challenged by the educator. It also allows learning disabled students to take

their time and receive special attention and care. In our current school system, learning disabled students are not always diagnosed as early as they could be, and as a consequence, may spend half a year or more in an environment which is frustrating to them, perhaps even humiliating for them, and which wastes their time, since they are incapable of functioning well in it. In the learning circle environment, such children would progress at their own pace and would in any case receive one on one instruction in such basic skills as reading and development of fine motor coordination.

Diagnosis would be more likely given such personal attention from an educator. Frustration and humiliation in front of peers would be much less likely since children of varying ages and abilities would be grouped together. Finally, it must be said that the learning circle model is envisioned as one of many possible learning environments. Some children may learn better in a more structured environment.

Age Mixing in the Circle One parent wondered if children of widely differing ages, from age six to eighteen, would be grouped together in a learning circle.

Since this environment is designed only for elementary students, the most that students could differ in age would be from age six to age twelve. However, it should be added that most educators would probably want to group students from age six to nine, and from age ten to twelve.

Principal's Role One parent felt that appointing a different educator as principal every year or so would badly affect the centre. It was argued that a full-time principal gives more structure and stability.

When all major decisions are taken by the group of educators as a whole, using consensus decision-making, the principal is less uniquely responsible for maintaining structure and stability as would be the case in a more hierarchic decision-making organization. He or she is then primarily responsible for carrying out the duties of administration and communication that need to be taken care of daily. The educators as a group should have as their goal the creation and maintenance of a stable and well-functioning learning centre.

Talking Stick One parent was unsure about the use of the talking stick method for group communication. She felt that it may make children feel self-conscious to have to hold the stick and so to have to speak to the group.

A revised design description would clarify that the talking stick process does not require that everyone speak. It simply allows everyone to speak without interruption for as long as they wish. Some people may find the uninterrupted talking time somewhat intimidating, especially at first. Most people with whom I have used the talking stick process seem to appreciate it.

Motivation to Acquire the Basics One parent expressed concern about children who do not like to do things that they are not good at. How would the educator in the learning circle environment get them to do these things, and so to improve their skills?

A revised design description would clarify the learners' acquisition of basic skills as follows. First, if children do not want to do things that they do not do well, there is a reason. If they fear judgement or failure, the learning circle environment can help. The learning circle is designed to be a safe place for learning; one where people are not directly compared with others in terms of their abilities or disabilities. If a child continues to avoid certain activities over a period of time, the educator, an older child, and parent volunteers can coax and encourage the child to practice and improve the skill. The learning circle is a place where people can explore their interests and direct their own learning. However, basic skills that enable people to become self-sufficient learners are taught, practised and acquired in the learning circle. Sitting with the educator, or a parent volunteer and learning at one's own pace to tie shoe laces, to do long division, or to write the letter "r", is less intimidating and more encouraging than simply being told to do it, or else.

Community Influence One parent worried about the possibility of a strong, but unrepresentative community influence on decision making. Could one group or member of the community dominate?

With consensus decision making, this becomes less likely. Everyone must reach agreement in order to achieve consensus. As well, parents meet to choose a representative to attend learning centre meetings; someone who has the time, wants to be involved in meetings and does represent the parents.

Parental Involvement There was also an expression of need on the part of two parents for more explicit information about parent involvement and decision making at the learning centre. This is given above in the section on what is missing from the design description.

Preparing Children to Face the World A parent was concerned about how well the learning circle will prepare children for the "harsh realities" of life and the responsibilities of adolescence and adulthood.

In a revised description of the learning circle system, the following would help to clarify. The learning circle environment emphasizes self-directed activity and the development of self-evaluation strategies. The child educated through a learning circle may have more self-sufficiency and a greater sense of personal responsibility than others. As well, the learning circle environment expands greatly to encompass the world surrounding the circle. The learner encounters the real world as often as possible and can then

discuss the encounter and work to understand that world back in the safety of the learning circle.

The children would not visit only museums, zoos and a planetarium on their field trips. They can visit a modern dairy farm and a potato chip factory. They can visit city hall and the city garbage dump. In the learning circle environment, children can see some of life's harsher moments and then discuss these in a circle of trust and safety so that a greater understanding of the world around them is achieved.

Concerns of Teachers

Four of the people who read and responded to the design are teachers in the Montreal area. Some people, who are not teachers did answer the question as to whether or not they would like to teach in such an environment anyway. Of the eight people who responded to the question, four chose the second response; yes, but with some concerns and caution. Three chose an unqualified yes as the response. One chose the third response; no, not unless the learning circle was modified. The concerns of teachers follow.

Rotating Principalship One teacher expressed reservations about a rotating principalship. She felt that "a principal improves each year with new experiences. Changing would perhaps have someone learning the ropes each year."

Perhaps an educator at the centre would remain as acting principal for three, four, or even five years. Eventually, this person could change roles and train someone else.

Testing Concerns This teacher also felt that there should be less focus on standardized tests like the Canadian Test of Basic Skills, and more focus on individualized testing against oneself.

Ministry Requirements One teacher expressed concern with the dichotomy of self-directed learning and Ministry of Education curriculum guidelines. It was felt that these guidelines would be very difficult to follow if learners were truly acting from their own interests. Also, self-directed activity mignt fail to teach children how to handle the frustrations of necessary, but uninteresting tasks later in school or in life.

In revising the design description, the following would be included. Learners in the circle follow their own interests a lot of the time, but also work with the educator to fulfil the requirements of the curriculum set by the Ministry. Thus, they learn how to complete tasks which may not interest them. As well, even something fun and interesting can often become frustrating or difficult when carried through to its conclusion. In the learning circle, children are first encouraged and later expected to follow an idea through to its end, or to find the complete answer to a question no matter how long that might take.

Concerns of School Board Members

Two respondents to the questionnaire are involved with Montreal area school boards as elected trustees. Both of these people expressed concerns about the feasibility of running a learning centre like the one described. Both mentioned costs and obstacles in the form of Ministry regulations and other rules. Their concerns are discussed below.

Budgeting and Hiring Staff One trustee felt that a budget should have been included in the design description. He also saw a difficulty in finding appropriate staff for the learning circle. "To offer such a learning environment you would require the services of a well motivated and disciplined teacher. The teachers' union would be an obstacle in providing this type of teacher due to collective agreements and seniority." He suggested a design including some form of flexibility in the hiring process to allow for the hiring of appropriate educators.

Hidden Costs and Obstacles The other trustee felt that the Ministry rules and regulations would prove very difficult to deal with. Ministry funding would be required and this is foreseen in the learning circle design. Also, building codes, fire regulations and a need for insurance would add to the cost of the learning centre.

Both respondents associated with school boards liked the design, but had words of warning and predictions of difficulty in its actual implementation in Quebec at this time.

Conclusion

The respondents' enthusiasm for the design and willingness to consider enroling children in such an environment were very encouraging. Teachers' willingness to work in such an environment is also encouraging. Concerns and cautions were expected. None of the concerns expressed by parents seem to pose any major problems for implementation of the design. Implementation would require a good deal more specific planning and definition of roles. The design itself is intended as a spring board from which to proceed. The cautions about obstacles to implementation were also foreseen. Many people would be made very uncomfortable by the implementation of such a different learning system.

Bela H. Banathy (1991) wrote of the need for radical visions and new ideas about teaching and learning to enable designers and planners to meet the challenges facing them now. One of the respondents to the questionnaire wrote, "the writer is either incredibly naive, or a visionary, or both". My hope is that such visions can enable educators, designers and educational technologists to expand the paradigm within which they currently function. New ideas can lead to solutions.

References

Allman, Paula (1987) "Paulo Freire's Education Approach" in Garth Allen, John Bastiani, Ian Martin & J. Kelvyn Richards (Eds.) Community Education: an agenda for educational reform, Milton Keynes, England: Open University Press.

Allen, Garth; Bastiani, John; Martin, Ian and Richards, Kelvyn J. (1987) "Conclusion" in Garth Allen, John Bastiani, Ian Martin & J. Kelvyn Richards (Eds.) Community Education: an agenda for educational reform, Milton Keynes, England: Open University Press.

Anderson, Beverly I. (1993) "The Stages of Systemic Change" Educational Leadership, (51), 1, 14-17.

Armstrong, Michael (1973) "The Role of the Teacher" in Deal, Terrence E. and Nolan, Robert R. Eds. (1978) Alternative Schools, Chicago, Illinois: Nelson-Hall, Inc.

Bacharach, Samuel B. (1990) "Education Reform: making sense of it all" in Samuel B. Bacharach (Ed.) Education Reform: making sense of it all, Massachusetts: Allyn and Bacon.

Bahner, John M. (1979) "Individually Guided Education" in Ignas, Edward and Corsini, Raymond J. (Eds.) Alternative Educational Systems, Itasca, Illinois: F. E. Peacock Publishers, Inc.

Banathy, Bela H. (1991) "Comprehensive Systems Design in Education" Educational Technology, (31), 3, 33-35.

Banks, James A. (1991) "A Curriculum for Empowerment, Action, and Change" in Christine E. Sleeter (Ed.) Empowerment Through Multicultural Education, New York: State University of New York Press.

Barlow, Maude and Robertson, Heather-Jane (1994) Class Warfare: the assault on Canada's schools, Toronto, Ontario: Key Porter Books Limited.

Barrett, Edward (1993) "Collaboration in the Electronic Classroom" Technology Review, February/March, 51-55.

Barrow, Robin (1978) Radical Education: a critique of freeschooling and deschooling, London, England: Martin Robertson & Company Limited.

Barrow, Robin (1991) "So Much for the Mind" in Derek J. Allison & Jerry Paquette (Eds.) Reform and Relevance in Schooling: dropouts, de-streaming and the common curriculum, Toronto, Ontario: OISE Press.

Barth, R. (1972) Open Education and the American School, New York: Agathon Press, Inc.

Beck, Robert H. (1987) "The New Education of Europe" The Educational Forum, (51), 2, 123-135.

Beckhard, R. and Harris, R.T. (1987) Organizational Transitions, 2nd ed., Reading, PA: Addison-Wesley.

Bell, Daniel (1973) The Coming of Post-Industrial Society: a venture in social forecasting. New York: Basic Books.

Bell, Lee Anne (1991) "Changing Our Ideas About Ourselves: group consciousness raising with elementary school girls as a means to empowerment" in Christine E. Sleeter (Ed.) Empowerment Through Multicultural Education, New York: State University of New York Press.

Bereiter, C. & Scardamelia, M. (1987) "An Attainable Version of High Literacy: approaches to teaching higher-order skills in reading and writing" Curriculum Inquiry, (17), 1, 9-30.

Bishop, John (1990) "Docility and Apathy: their cause and cure" in Samuel B. Bacharach (Ed.) Education Reform: making sense of it all, Massachusetts: Allyn and Bacon.

Bodwell, Douglas F. (1988) "A Perspective on Public Broadcasting and Education" Social Education, September, 354-357.

Bolman, L.G. and Deal, T.E. (1991) Reframing Organizations: artistry, choice, and leadership. San Francisco: Jossey-Bass.

Boyd, William and Rawson, Wyatt (1965) The Story of the New Education, London, England: Heinesmann Educational Books.

Boyer, Ernest L. (1990) "The New Agenda for the Nation's Schools" in Samuel B. Bacharach (Ed.) Education Reform: making sense of it all, Massachusetts: Allyn and Bacon.

Bracey, Gerald W. (1994) "The Media's Myth of School Failure" Educational Leadership, September, 80-83.

Branson, Robert K. (1990) "Issues in the Design of Schooling: changing the paradigm" Educational Technology, 30, 4, 7-10.

Brophy, Jere (1987) "Synthesis of Research on Strategies for Motivating Students to Learn" Educational Leadership, (45), 2, 40-48.

Brown, G.I. (1971) Human Teaching for Human Learning: an introduction to confluent education, New York: Viking Press.

Bruner, Jerome S. (1971) "The Process of Education Revisited" Phi Delta Kappan, (53), 1, 18-21.

Buckman, Peter (1973) "Editorial Introduction" in Buckman, Peter (Ed.) Education Without Schools, London, England: Souvenir Press Ltd.

Calhoun, Emily F. (1993) "Action Research: three approaches" Educational Leadership, (51), 2, 62-65.

Cameron, Brent (1990) Wondertree: a study in the principles and methodologies of a wholistic natural learning model, Vancouver, British Columbia: Simon Fraser University.

Carlisle, Kenneth E. (1993) "The Politics of Educational Reform" Educational Technology, May, 43-47.

Carlson, Dennis (1992) Teachers and Crisis: urban school reform and teachers' work culture, New York: Routledge, Chapman and Hall, Inc.

Carr, W. and Kemmis, S. (1986) Becoming Critical: education, knowledge and action research, Brighton, Sussex: Falmer Press.

Chubb, John E. and Moe, Terry M. (1992) A Lesson in School Reform from Great Britain, Washington, D.C.: The Brookings Institution.

Chung, Jaesam (1991) "Collaborative Learning Strategies: the design of instructional environments for the emerging new school" Educational Technology, 31, 12, 15-22.

Clark, David (1987) "The Concept of Community Education" in Garth Allen, John Bastiani, Ian Martin & J. Kelvyn Richards (Eds.) Community Education: an agenda for educational reform, Milton Keynes, England: Open University Press.

Coates, Ken (1973) "Education as a lifelong Experience" in Buckman, Peter (Ed.) Education Without Schools, London, England: Souvenir Press Ltd.

Conley, Sharon C. (1990) "Reforming Paper Pushers and Avoiding Free Agents: the teacher as a constrained decision maker" in Samuel B. Bacharach (Ed.) Education Reform: making sense of it all, Massachusetts: Allyn and Bacon.

Considine, David M. (1990) "Media Literacy: can we get there from here?" Educational Technology, 30, 12, 27-32.

Constable, R. & Walberg, H.J. (1987) "The New Thrust Toward Partnership of Parents and Schools", Journal of Family and Culture, (12), 3, 15-34.

Cooper, Peter A. (1993) "Paradigm Shifts in Designed Instruction: from behaviorism to cognitivism to constructivism", Educational Technology, May, 12-18.

Corey, S.M. (1953) Action Research to Improve School Practices, New York: Teachers College Press.

Cremin, Lawrence A. (1973) Notes on Education II, October, 1-4.

Cremin, Lawrence A. (1978) "The Free School Movement: a perspective" in Deal, Terrence E. and Nolan, Robert R. Eds. (1978) Alternative Schools, Chicago, Illinois: Nelson-Hall, Inc.

Curle, A. (1973) Education for Liberation, New York: Wiley.

David, Miriam E. (1993) Parents, Gender and Education Reform, Cambridge, UK: Polity Press.

David, J.K. and Shields, P.M. (1991) From Effective Schools to Restructuring: a literature review, Menlo Park, Calif.: SRI International.

Deal, Terrence E. and Nolan, Robert R. (1978) "An Overview of Alternative Schools" in Deal, Terrence E. and Nolan, Robert R. Eds. (1978) Alternative Schools, Chicago, Illinois: Nelson-Hall, Inc.

Deal, Terrence E. (1978) "Muddling Through: a school above a bakery" in Deal, Terrence E. and Nolan, Robert R. Eds. (1978) Alternative Schools, Chicago, Illinois: Nelson-Hall, Inc.

Delaney, Jerome G. (1994) "Schools Run By Stakeholders: an overview of school-based management" Prism, spring, 23-26.

Dennison, George (1969) The Lives of Children, New York: Random House.

Dennison, George; Goodman, Paul; Hentoff, N.; Holt, John and Kozol, Jonathan (1972) "New Nation Seed Fund" in Sobel, Harold W. and Salz, Arthur E. (Eds.) The Radical Papers: readings in education, New York: Harper and Row.

Dewey, John (1910) My Pedagogic Creed, Chicago: A. Flanagan Co.

Dewey, John (1938) Experience and Education, New York: Collier Books.

Dobbin, Teresita (1994) "Educational Reform: a matter of curriculum" Prism, Spring, 36-38.

Duke, Daniel Linden (1976) "Challenge to Bureaucracy: the contemporary alternative school" The Journal of Educational Thought, (10), April, 34-48.

Elmore, Richard F. (1990) "Introduction: on changing the structure of public schools" in Richard F. Elmore and Associates (Eds.) Restructuring Schools: the next generation of educational reform, San Francisco, California: Jossey-Bass Inc.

Esbensen, Thorwald (1973) "Family-Designed Learning: accountability as customer satisfaction" in Carr, John C.; Grambs, Jean Dresden and Campbell, E.G. (Eds.) Alternative Schooling in Americ n Education: Pygmalion or Frankenstein?, Reading, Mass: Addison-Wesley Publishing Company.

Evans, Richard I. Ed. (1975) Carl Rogers: the man and his ideas, New York: E. P. Dutton.

Evans, Robert (1993) "The Human Face of Reform" Educational Leadership, (51), 1, 19-23.

Fantini, Mario D. (1974) "Alternatives in the Public School" Today's Education, September-October.

Fawson, E. Curtis and Smellie, Don C. (1990) "Technology Transfer: a model for public education" Educational Technology, 30, 4, 19-25.

Featherstone, Joseph (1976) What Schools Can Do, New York: Liveright Publishing Corporation.

Ferriere, Adolph (1928) The Activity School 3rd Ed., trans. F. Dean Moore and F.C. Wooton, New York: John Day.

Fleege, V. B. (1974) Standard Montessori Operating Procedures, Chicago: Montessori Publications.

Fleege, U. H. (1979) "Montessori System of Education" in Ignas, Edward and Corsini, Raymond J. Eds. (1979) Alternative Educational Systems, Itasca, Illinois: F.E. Peacock Publishers, Inc.

Fletcher, Colin (1987) "The Meanings of `Community' in Community Education" in Garth Allen, John Bastiani, Ian Martin & J. Kelvyn Richards (Eds.) Community Education: an agenda for educational reform, Milton Keynes, England: Open University Press.

Foster, Richard I. (1977) "Matters of Choice: A Ford Foundation Report on Alternative Schools" in Carr, John C.; Grambs, Jean Dresden; and Campbell, E. G. (Eds.) Alternative Schooling in American Education: Pygmalion or Frankenstein?, Reading, MA: Addison-Wesley.

Frankenstein, Marilyn (1992) "Critical Mathematics Education" in Kathleen Weiler and Candace Mitchell (Eds.) What Schools Can Do: critical pedagogy and practice, Albany, New York: State University of New York Press.

Freire, Paulo (1985) The Politics of Education: culture, power and liberation, trans. Donaldo Macedo, South Hadley, MA: Bergin & Garvey.

Fritz, Marshall (1994) "Why OBE and the Traditionalists are Both Wrong" Educational Leadership, (51), 6, 79-81.

Fullan, Michael and Stiegelbauer, Suzanne (1991) The New Meaning of Educational Change, Toronto, Ontario: OISE Press.

Garcia, Rodolfo (1990) "`StudyEdge' a new kind of open-ended, computer based, self-instructional system" Educational Technology, 30, 3, 63-65.

Gatto, John Taylor (1991) "The Six Lesson School Teacher" Whole Earth Review, Fall, 96-100.

Gideonse, Hendrik D. (1990) "Organizing Schools to Encourage Teacher Inquiry" in Richard F. Elmore and Associates (Eds.) Restructuring Schools: the next generation of educational reform, San Francisco, California: Jossey-Bass Inc.

Ginsberg, Rick and Wimpelberg, Robert (1988) "An Assessment of Twentieth-Century Commission Reports on Educational Reform" in Charles V. Willie and Inabeth Miller (Eds.) Social Goals and Educational Reform, Westport, Connecticut: Greenwood Press, Inc.

Giroux, Henry A. "The Hope of Radical Education" in Kathleen Weiler and Candace Mitchell (Eds.) What Schools Can Do: critical pedagogy and practice, Albany, New York: State University of New York Press.

Giroux, Henry A. and Simon, Roger I. (1992) "Schooling, Popular Culture, and a Pedagogy of Possibility" in Kathleen Weiler and Candace Mitchell (Eds.) What Schools Can Do: critical pedagogy and practice, Albany, New York: State University of New York Press.

Goodlad, J. (1983) A Place Called School, New York: McGraw-Hill.

Goodman, Paul (1970) New Reformation: notes of a neolithic conservative, New York: Random House.

Graubard, Allen (1972) Free the Children: radical reform and the free school movement, New York: Random House, Inc.

Gray, Peter and Chanoff, David (1984) "When Play is Learning: a school designed for self-directed education" Phi Delta Kappan, (65), 608-611.

Gray, Peter and Chanoff, David (1986) "Democratic Schooling: What happens to young people who have charge of their own education?" American Journal of Education, February, 182-213.

Gross, Ronald (1971) "From Innovations to Alternatives: A Decade of Change in Education" Phi Delta Kappan, (13), 1.

Halsted, H. (1992) "Designing Facilities for a New Generation of Schools" Educational Technology, 32, 10, 46-48.

Hamilton, Stephen F. (1983) "Synthesizing of Research on the Social Side of Schooling" Educational Leadership, (40), 65-72.

Hargreaves, Andy (1989) Curriculum and Assessment Reform, Bristol, PA: Open University Press.

Hawley, Willis D. (1990) "Missing Pieces of the Educational Reform Agenda: or, why the first and second waves may miss the boat" in Samuel B. Bacharach (Ed.) Education Reform: making sense of it all, Massachusetts: Allyn and Bacon.

Henchey, Norman (1987) "The New Technology and the Transformation of Learning" in Ratna Ghosh and Douglas Ray (Eds.) Social Change and Education in Canada, Toronto, Ontario: Harcourt Brace Jovanovich, Canada.

Henchey, Norman and Burgess, Donald A. (1987) Between Past and Future: Quebec education in transition, Calgary, Alberta: Detselig Enterprises Limited.

Hillis, Eric S. (1973) "Those Who Can't Teach..." in Myers, Douglas Ed. (1973) The Failure of Educational Reform in Canada, Toronto: McClelland and Stewart Limited.

Hipkin, John (1973) "Learning in Groups" in Deal, Terrence E. and Nolan, Robert R. Eds. (1978) Alternative Schools, Chicago, Illinois: Nelson-Hall, Inc.

Holmes, Mark (1991) "The Future of the Public School in Canada" in Derek J. Allison & Jerry Paquette (Eds.) Reform and Relevance in Schooling: dropouts, de-streaming and the common curriculum, Toronto, Ontario: OISE Press.

Holt, John (1970) How Children Fail. New York: Dell Publishing Co.

Holzman, Michael (1993) "What Is Systemic Change?" Educational Leadership, (51), 1, 18.

Hook, Sidney (1977) "How the Insurgents Misinterpret Dewey" in Carr, John C.; Grambs, Jean Dresden and Campbell, E.G. (Eds.) Alternative Schooling in American Education: Pygmalion or Frankenstein?, Reading, Mass: Addison-Wesley Publishing Company.

Howard, E. (1967) "How to be Serious About Innovating" Nation's Schools, April, 79, 89-90, 130.

Ignas, Edward and Corsini, Raymond J. Eds. (1979) Alternative Educational Systems, Itasca, Illinois: F.E. Peacock Publishers, Inc.

Illich, Ivan (1973) "The Deschooled Society", in Buckman, Peter (Ed.) Education Without Schools, London, England: Souvenir Press Ltd.

Johnson, D.W. and Johnson, R.T. (1989) Cooperation and Competition: theory and research, Edina, MN: Interaction Book Company.

Johnson, D.W.; Johnson, R.T.; Stanne, M.B. and Garibaldi, A. (1990) "Impact of Group Processing on Achievement in Cooperative Groups" Journal of Social Psychology, (130), 4, 507-516.

Johnson, Susan Moore (1990) "Redesigning Teachers' Work" in Richard F. Elmore and Associates (Eds.) Restructuring Schools: the next generation of educational reform, San Francisco, California: Jossey-Bass Inc.

Jonassen, David H. (1990a) "Thinking Technology: chaos in instructional design" Educational Technology, 30, 2, 32-34.

Jonassen, David H. (1990b) "Thinking Technology: toward a constructivist view of instructional design" Educational Technology, (30), 9, 32-34.

Jonassen, David H. (1991) "Objectivism Versus Constructivism: do we need a new philosophical paradigm?" Educational Technology Research and Development, (39), 3, 5-14.

Kahane, Ernest and Oram, Andrew D. (1989) "Where Computers are Taking Us in the Education Field" in Christine M. Shea, Ernest Kahane and Peter Sola (Eds.) The New Servants of Power: a critique of the 1980s school reform movement, Westport, Connecticut: Greenwood Press.

Kass, R.G. and Fish, J.M. (1991) "Positive Reframing and the Test Performance of Test Anxious Children" Psychology in the Schools, (28), 1, 43-52.

Katz, Michael B. (1973) "Class, Bureaucracy and Schools" in Myers, Douglas Ed. (1973) The Failure of Educational Reform in Canada, Toronto: McClelland and Stewart Limited.

Keegan, Mark (1993) "Optimizing the Instructional Moment: a guide to using socratic, didactic, inquiry and discovery methods" Educational Technology, April, 17-21.

Kent, John D. (1987) "A Not Too Distant Past: echoes of the calls for reform" The Educational Forum, (51), 2, 137-150.

Kerchner, Charles T. (1990) "Bureaucratic Entrepreneurship: the implications of choice for school administrators" in Samuel B. Bacharach (Ed.) Education Reform: making sense of it all, Massachusetts: Allyn and Bacon.

Kirst, Michael W. (1990) "Recent State Education Reform in the United States: Looking Backward and Forward" in Samuel B. Bacharach (Ed.) Education Reform: making sense of it all, Massachusetts: Allyn and Bacon.

Kozol, Jonathan (1975) Free Schools, New York: Bantam.

Ladson-Billings, Gloria (1994) "What We Can Learn From Multicultural Education Research" Educational Leadership, (51), 8, 22-26.

Lawton, Stephen B. and Tzalalis, Theodore (1994) "The Social and Economic Goals of Education: a dichotomy?" Education Canada, (34), 1, 28-36.

Levin, H.M. (1984) Improving Productivity Through Education and Technology, Stanford, California: Stanford University, Institute for Research on Educational Finance and Governance.

Lewin, K. (1947) "Group Decisions and Social Change" in T.M. Newcomb and E.L Hartley (Eds.) Readings in Social Psychology, New York: Henry Holt.

Lister, Ian (1973) "Getting There From Here" in Buckman, Peter (Ed.) Education Without Schools, London, England: Souvenir Press Ltd.

Lynch, Ann Q. and Chickering, Arthur W. (1988) "Individual Enhancement as the Personal Purpose of Education" in Charles V. Willie and Inabeth Miller (Eds.) Social Goals and Educational Reform, Westport, Connecticut: Greenwood Press, Inc.

Macdonald-Ross, Michael (1973) "Acquiring and Testing Skills" in Deal, Terrence E. and Nolan, Robert R. Eds. (1978) Alternative Schools, Chicago, Illinois: Nelson-Hall, Inc.

Malen, Betty and Ogawa, Rodney T. (1990) "Decentralizing and Democratizing the Public Schools - A Viable Approach to Reform?" in Samuel B. Bacharach (Ed.) Education Reform: making sense of it all, Massachusetts: Allyn and Bacon.

Margurger, Carl L. (1990) "Education Reform: the neglected dimension, parent involvement" in Samuel B. Bacharach (Ed.) Education Reform: making sense of it all, Massachusetts: Allyn and Bacon.

Martin, Don T. (1989) "A Critique of the Concept of Work and Education in the School Reform Reports" in Christine M. Shea, Ernest Kahane and Peter Sola (Eds.) The New Servants of Power: a critique of the 1980s school reform movement, Westport, Connecticut: Greenwood Press.

Martin, Ian (1987) "Community Education: towards a theoretical analysis" in Garth Allen, John Bastiani, Ian Martin & J. Kelvyn Richards (Eds.) Community Education: an agenda for educational reform, Milton Keynes, England: Open University Press.

Marton, F. (1975) "What Does it Take to Learn?" in Noel Entwistle and Dai Hounsell (Eds.) How Students Learn, Lancaster, England: University of Lancaster.

Marton, F. (1989) "The Nature and Development of Competence" paper presented to the sixth annual conference of the Hong Kong Educational Research Association, Hong Kong, November.

Maslow, Abraham H. (1966) The Farther Reaches of Human Nature, New York: Penguin Books.

Maslow, Abraham H. (1968) Toward a Psychology of Being, 2nd ed., New York: D. Van Nostrand.

Mayer, Frederick (1964) American Ideas and Education, Columbus, Ohio: Charles E. Merrill Books, Inc.

McGhan, Barry (1994) "The Possible Outcomes of Outcome-Based Education" Educational Leadership, (51), 6, 70-72.

McNay, Margaret (1991) "The Radwanski Report: Elementary Misunderstandings about Elementary School Education" in Derek J. Allison & Jerry Paquette (Eds.) Reform and Relevance in Schooling: dropouts, de-streaming and the common curriculum, Toronto, Ontario: OISE Press.

McPeck, John E. (1991) "Radwanski, Dropouts and Thinking Skills" in Derek J. Allison & Jerry Paquette (Eds.) Reform and Relevance in Schooling: dropouts, de-streaming and the common curriculum, Toronto, Ontario: OISE Press.

Means, Barbara and Olson, Kerry (1994) "The Link Between Technology and Authentic Learning" Educational Leadership, (51), 7, 15- 18.

Miller, Jack (1994) "An Organic Approach to Change" Orbit, (24), 4, 20-22.

Milner, Henry (1986) The Long Road to Reform: restructuring public education in Quebec, Kingston and Montreal: McGill-Queen's University Press.

Ministere de l'Education (1982) The Quebec School: a Responsible Force in the Community, Quebec: Gouvernement du Quebec.

Mitchell, David (1984) "Educational Systems Analysis", Montreal, Canada: Concordia University.

Mitchell, David (1990) "The Failure of Educational Technology and the Need for a Cybernetic Systems Design Perspective", Montreal, Canada: Concordia University.

Mitchell, Gordon (1987) "Community Education and School: a commentary" in Garth Allen, John Bastiani, Ian Martin & J. Kelvyn Richards (Eds.) Community Education: an agenda for educational reform, Milton Keynes, England: Open University Press.

Monson, Michele P. and Monson, Robert J. (1993) "Who Creates Curriculum? New Roles for Teachers" Educational Leadership, (51), 2, 19-21.

Montagu, Ashley (1977) "We're botching the Business of Education" in Carr, John C.; Grambs, Jean Dresden and Campbell, E.G. (Eds.) Alternative Schooling in American Education Pygmalion or Frankenstein?, Reading, Mass: Addison-Wesley Publishing Company.

Morris, Van Cleve (1966) Existentialism in Education: what it means, New York: Harper & Row.

Moustakas, Clark (1972) Teaching as Learning, New York: Ballantine Books.

Myers, Douglas Ed. (1973) The Failure of Educational Reform in Canada, Toronto: McClelland and Stewart Limited.

Neill, A. S. (1960) Summerhill: A Radical Approach to Child Rearing, New York: Hart.

Nemiroff, Greta Hofmann (1992) Reconstructing Education: toward a pedagogy of critical humanism, New York: Bergin & Garvey.

Nolan, Robert R. (1978) "Student Power: a case study" in Deal, Terrence E. and Nolan, Robert R. Eds. (1978) Alternative Schools, Chicago, Illinois: Nelson-Hall, Inc.

O'Neil, John (1993) "Turning the System on its Head" Educational Leadership, (51), 1, 8-11.

Ooka Pang, Valerie (1991) "Teaching Children About Social Issues: Kidpower" in Christine E. Sleeter (Ed.) Empowerment Through Multicultural Education, New York: State University of New York Press.

Paulston, Rolland G. (1983) "Conflicting Theories of Educational Reform" in John Simmons (Ed.) Better Schools: International Lessons for Reform, Buffalo, New York: The Praeger Special Studies Series in Comparative Education in cooperation with the Comparative Education Center, State University of New York.

Paris, Scott G. et al (1991) "A Developmental Perspective on Standardized Achievement Testing" Educational Researcher, (20), 5, 12-20.

Peck, Kyle L. and Dorricott, Denise (1994) "Why Use Technology?" Educational Leadership, (51), 7, 11-14.

Phillips, Charles E. (1957) The Development of Education in Canada, Toronto: W.J. Gage and Company Limited.

Pink, William T. (1989) "The New Equity: competing visions" in Christine M. Shea, Ernest Kahane and Peter Sola (Eds.) The New Servants of Power: a critique of the 1980s school reform movement, Westport, Connecticut: Greenwood Press.

Popkewitz, Thomas S. (1991) A Political Sociology of Educational Reform, New York: Teachers College Press.

Postman, Neil and Weingartner, Charles (1977) "A History of the Hollering" in Carr, John C.; Grambs, Jean Dresden and Campbell, E.G. (Eds.) Alternative Schooling in American Education: Pygmalion or Frankenstein?, Reading, Mass: Addison-Wesley Publishing Company.

Postman, N. and Weingartner, C. (1987) Teaching as a Subversive Activity, New York: Dell Publishing.

Potter, Geoffrey D. (1972) The Development of Free Schools, Montreal, Canada: Sir George Williams University.

Priesnitz, Wendy (1993) School Free: home based education in Canada, St. George, Ontario: The Alternate Press.

Purpel, David E. (1988) The Moral and Spiritual Crisis in Education, South Hadley, MA: Begin & Garvey.

Raywid, Mary Anne (1990) "Rethinking School Governance" in Richard F. Elmore and Associates (Eds.) Restructuring Schools: the next generation of educational reform, San Francisco, California: Jossey-Bass Inc.

Reich, Robert B. (1990) "Education and the Next Economy" in Samuel B. Bacharach (Ed.) Education Reform: making sense of it all, Massachusetts: Allyn and Bacon.

Reigeluth, Charles M. (1987) "The Search for Meaningful Reform: a third-wave educational system" Journal of Instructional Development, 10, 4, 3-14.

Reigeluth, Charles M. (1992) "The Imperative for Systemic Change" Educational Technology, 32, 11, 9-13.

Reigeluth, Charles M. and Garfinkle, Robert J. (1992) "Envisioning a New System of Education" Educational Technology, 32, 11, 17-23.

Reimer, Everett (1972) "An Essay on Alternatives in Education" in Sobel, Harold W. and Salz, Arthur E. (Eds.) The Radical Papers: readings in education, New York: Harper & Row.

Repman, Judi (1993) "Collaborative, Computer-Based Learning: cognitive and affective outcomes" Educational Computing Research, (9), 2, 149-163.

Richards, Kelvyn (1987) "Neighbourhood Centres, Not Community Schools" in Garth Allen, John Bastiani, Ian Martin & J. Kelvyn Richards (Eds.) Community Education: an agenda for educational reform, Milton Keynes, England: Open University Press.

Riley, Alan (1994) "Parent Empowerment: an idea for the Nineties?" Education Canada, (34), 3, 14-20.

Robertson, Margaret (1994) "Non-graded Primary Classrooms" Orbit.

Rogers, Carl (1969) Freedom to Learn, Columbus, Ohio: Charles E. Merrill.

Rogers, Carl R. (1971) Carl Rogers on Personal Power, New York: Delacorte Press.

Rogers, Carl R. (1983) Freedom to Learn for the 80s, Columbus, Ohio: Charles E. Merrill.

Rogers, Vincent (1979) "Open Education" in Ignas, Edward and Corsini, Raymond J. (Eds.) Alternative Educational Systems, Itasca, Illinois: F. E. Peacock Publishers, Inc.

Romiszowski, A. J. (1981) Designing Instructional Systems, London, England: Kogan Page Ltd.

Rowson, Richard (1973) "Learning for Learning's Sake" in Deal, Terrence E. and Nolan, Robert R. Eds. (1978) Alternative Schools, Chicago, Illinois: Nelson-Hall, Inc.

Salisbury, David F. (1992) "Toward a New Generation of Schools: The Florida Schoolyear 2000 Initiative" Educational Technology, 32, 7, 7-16.

Sapon-Shevin, Mara and Schniedewind, Nancy (1991) "Cooperative Learning as Empowering Pedagogy" in Christine E. Sleeter (Ed.) Empowerment Through Multicultural Education, New York: State University of New York Press.

Sarason, Seymour B. (1991) The Predictable Failure of Educational Reform, San Francisco, California: Jossey-Bass Inc.

Schein, E. (1985) Organizational Culture and Leadership. San Francisco: Jossey-Bass.

Shedd, Joseph B. (1990) "Collective Bargaining, School Reform, and the Management of School Systems" in Samuel B. Bacharach (Ed.) Education Reform: making sense of it all, Massachusetts: Allyn and Bacon.

Simmons John (1983) "Reforming Education and Society: the enduring quest" in John Simmons (Ed.) Better Schools: International Lessons for Reform, Buffalo, New York: The Praeger Special Studies Series in Comparative Education in cooperation with the Comparative Education Center, State University of New York.

Sirotnik, K. (1983) "What You See is What You Get: consistency, persistency, and mediocrity in classrooms" Harvard Education Review (53), 1, 16-31.

Sizer, Theodore R. (1984) Horace's Compromise: the dilemma of the American high school, first report from a study of high schools, cosponsored by the National Association of Secondary School Principals and the Commission on Educational Issues of the National Association of Independent Schools. Boston: Houghton Mifflin.

Slavin, Robert E. (1987) "Cooperative Learning and the Cooperative School" Educational Leadership, (45), 3, 7-13.

Smith, J. (1986) Insult to Intelligence, New York: Arbor House.

Smith, Mortimer (1973) "CBE Views the Alternatives" Phi Delta Kappan, (54), 7, 441-443.

Smith, Vernon (1977) "Optional Alternative Public Schools: new partners in education" in Carr, John C.; Grambs, Jean Dresden and Campbell, E.G. (Eds.) Alternative Schooling in American Education: Pygmalion or Frankenstein?, Reading, Mass: Addison-Wesley Publishing Company.

SooHoo, Suzanne (1993) "Students as Partners in Research and Restructuring Schools" The Educational Forum, (57), summer, 386-393.

Stevenson, Hugh A. (1973) "Ten Years to Know-Where" in Myers, Douglas Ed. (1973) The Failure of Educational Reform in Canada, Toronto: McClelland and Stewart Limited.

Stinchcombe, Arthur L. (1964) Rebellion in a High School, Chicago: Quadrangle.

Stodolsky, S. S. (1988) The Subject Matters, Chicago: The University of Chicago Press.

Swidler, Ann (1979) Organization Without Authority: dilemmas of social control in free schools, Cambridge, Mass: Harvard University Press.

Sykes, Gary (1990) "Inspired Teaching: the missing element in `effective schools'" in Samuel B. Bacharach (Ed.) Education Reform: making sense of it all, Massachusetts: Allyn and Bacon.

The National Task Force on Educational Technology (1986) "Transforming American Education: reducing the risk to the nation" Report to the Secretary of Education, Office of Educational Research and Improvement, United States Department of Education.

Thomas, Gail E. (1988) "Socialization and Conformity in Education" in Charles V. Willie and Inabeth Miller (Eds.) Social Goals and Educational Reform, Westport, Connecticut: Greenwood Press, Inc.

Thompson, James D. (1976) "Society's Frontiers for Organizing Activities" in Rushing, William A. and Zald, Mayer N. (Eds) Organization and Beyond: selected essays of James D. Thompson, Lexington, Mass: D.C. Heath.

Toch, Thomas (1991) In The Name of Excellence: the struggle to reform the nation's schools, why it's failing and what should be done, New York: Oxford University Press.

Toffler, Alvin (1974) "The Role of the Future in Education" in Toffler, Alvin (Ed.) Learning for Tomorrow, New York: Random House.

Tripp, Steven D. (1993) "Theories, Traditions, and Situated Learning" Educational Technology, March, 71-76.

Truefitt, Alison and Newell, Peter (1973) "Abolishing the Curriculum and Learning Without Exams" in Deal, Terrence E. and Nolan, Robert R. Eds. (1978) Alternative schools, Chicago, Illinois: Nelson-Hall, Inc.

Urbanski, Adam (1990) "Restructuring Schools for Greater Choice: the Rochester initiative" in Samuel B. Bacharach (Ed.) Education Reform: making sense of it all, Massachusetts: Allyn and Bacon.

Wagner, Laura A. (1990) "Emerging Public Policy Issues in the Support and Assessment of New Classroom Teachers" in Samuel B. Bacharach (Ed.) Education Reform: making sense of it all, Massachusetts: Allyn and Bacon.

Wagner, Tony (1993) "Systemic Change: rethinking the purpose of school" Educational Leadership, (51), 1, 24-28.

Walen, Elizabeth and DeRose, Mimi (1993) "The Power of Peer Appraisals" Educational Leadership, (51), 2, 45-48.

Wang, Margaret C.; Haertel, Geneva D. and Walberg, Herbert J. (1990) "What Influences Learning? A Content Analysis of Review Literature" Journal of Educational Research, (84), 1, 30-43.

Ward, Colin (1973) "The Role of the State" in Buckman, Peter (Ed.) Education Without Schools, London, England: Souvenir Press Ltd.

Weaver, Timothy W. (1982) The Contest for Educational Resources, Toronto, Ontario: Lexington Books.

Weick, K. (1976) "Educational Organizations as Loosely Coupled Systems" Administrative Science Quarterly, (21), 1, 1-19.

Wickstrom, Rod A. (1994) "Educational Change: can we make sense of reality?" Education Canada, winter/hiver, 4-10.

Willie, Charles V. and Miller, Inabeth (1988) "An Analytic Perspective for Educational Reform" in Charles V. Willie and Inabeth Miller (Eds.) Social Goals and Educational Reform, Westport, Connecticut: Greenwood Press, Inc.

Willie, Charles V. and Miller, Inabeth (1988) "Who Shall be Educated?" in Charles V. Willie and Inabeth Miller (Eds.) Social Goals and Educational Reform, Westport, Connecticut: Greenwood Press, Inc.

Winfield, L. (1986) "Teacher Beliefs Toward At-Risk Students in Inner-Urban Schools" The Urban Review, (18), 253-267.

Winn, William (1990) "Some Implications of Cognitive Theory for Instructional Design" Instructional Science, (19), 53-69.

Woodruff, A.D. (1973) "Principles of Motivation for Learning" in A. R. Gayles (Ed.) Instructional Planning in the Secondary School, New York: David McKay.

APPENDIX A
EVALUATIVE QUESTIONNAIRE
FOR
THE LEARNING CIRCLE
LEARNING ENVIRONMENT DESIGN

INSTRUCTIONS: Having read the description and explanation of "The Learning Circle" learning environment, please answer the following questions as completely as you are able.

1. What is missing from this description? What would you like to know about, in terms of the learning environment proposed, which has not been included in the reading?

2. As a parent, would you be willing to enroll your child in a learning circle environment such as the one described?

☐ Yes, I would like that very much.

☐ Yes, but with some concerns and caution.

☐ No, not unless the learning circle was modified.

☐ No, not at all.

3. Based on your response to the above question, please list your concerns, or tell how you would like the learning circle to be modified. If you like the learning circle model very much, please say why. If you do not like the learning circle model at all please say why. In other words, no matter what you responded above, please elaborate on your choice below.

4. As a teacher, would you be willing to teach in a learning circle environment such as the one described?

☐ Yes, I would like that very much.

☐ Yes, but with some concerns and caution.

☐ No, not unless the learning circle was modified.

☐ No, not at all.

5. Based on your response to the above questio please list your concerns, or tell how you would like the learning circle to be modified. If you like the learning circle model very much, please say why. If you do not like the learning circle model at all please say why. In other words, no matter what you responded above, please elaborate on your choice below.

Thank you very much for all of your time and consideration. You have helped tremendously and your contribution will not be forgotten.