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Re-Thinking Education and Schooling in the 1990s

by

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ABSTRACT

Our modern Western social and economic world at present appears to be experiencing a confusing transformation and change in its basic structure and organization. Capitalism is being challenged by the emergence of new forces in technology, markets, social structures and institutions - forces which will re-shape the functioning of dominating economies that have existed since the Second World War. Within this transformation, the essence of forces which drive, stabilize, and reproduce the capitalist world have been brought into question. Expressions of this 'new age' of capitalism are reflected in discussions of 'structural crisis', 'transformation' and 'transition' within descriptors such as 'post-industrial', 'post-Fordist, and 'post-modern.' Within this thesis is an intent to examine relationships between Post-Fordist theory and the current political, economic, social, and cultural changes occurring within Alberta's Education system and its implications for teachers within the Calgary Board of Education. Through this analysis, implications of current initiatives and their implementation will offer insight into a new form of non-bureaucratic organizational redesign which brings the basic mission of education into closer alignment with those of the larger society.

DEDICATION

To my husband Spencer and my sons, Jess, Matthew and Daniel
for their love, support and understanding

TABLE OF CONTENTS

APPROVAL PAGE ii

ABSTRACT iii

DEDICATION iv

TABLE OF CONTENTS v

CHAPTER 1: INTRODUCTION 1

CHAPTER 2: THE NATURE OF CHANGE 8

Questioning Modernity 10

Fordist-Keynesianism 18

CHAPTER 3: SOCIAL EFFECTS AND EDUCATION REFORM 25

Post Modernity 31

Post-Fordism 34

Change in Education 40

CHAPTER 4: EFFECTS ON SCHOOLS 43

CHAPTER 5: HOW SHOULD AN INDIVIDUAL RESPOND: THEORETICAL 52

The Argument for Post-Bureaucratic Educational Organization 66

CHAPTER 6: HOW SHOULD AN INDIVIDUAL RESPOND: PERSONAL 69

CHAPTER 7: CONCLUSION 82

BIBLIOGRAPHY 85

Chapter 1

INTRODUCTION

For the Timid,
Change is Frightening
For the Satisfied,
Change is Threatening
For the Confident,
Change is Opportunity

Author Unknown

This is a paper about change; from the perspective of a teacher working within a political, economic and social climate of change in Alberta. As an educator, I have found my role to be increasingly contradictory. On the one hand, an effort to afford students and myself the opportunity to encompass a sense of purpose and reason for being in school has led me to search for the *Why* of current institutional reforms which directly implicate the *What* and *How* associated with the pragmatics of the teaching and learning process. On the other, is a personal attempt to justify an intrinsic belief that with the conflict that accompanies change, there is opportunity to re-shape, re-define, and re-think the underlying purposes of schooling in order to better meet the needs of an increasingly global society.

As an educator in the 1990s, I have found my life become more intensely confusing due to the constant tension between conflicting messages; messages regarding differing rationales

and philosophies in curriculum orientations and government bombardment on every front in its efforts to restructure education. When Ralph Klein's conservative government initiated its plans for government restructuring in 1992, the extensive and rapid changes encroached on every aspect of education, or so it seemed. It was as if we were caught in a chaotic, ever changing whirlwind, not sure of the direction or in which context change would take place next. With an ever increasing infusion of business involvement and management rhetoric, accountability frameworks, regionalization of school boards, increasing emphasis on technology, the introduction of increased school involvement and choice of schools for parents and students, the undermining of the teacher's union, suspicion and lack of trust in teachers' and schools' abilities to 'deliver' competent students to the work force and the increased drive for individualism led me to question what this confusion meant. My intrinsic beliefs in promoting active metacognition, discussion and debate, the fostering of curiosity, creativity and discovery of relationships with the students in my classroom appeared to be at risk.

As an elementary teacher, it has been difficult settling my own experiences in the context of this paper. My own feelings of inadequacy stem from lack of first hand experience at all levels of schooling knowing that my beliefs about teaching and learning stem from elementary classroom experience that has been carried out in isolation. By beginning a career in the early 1980s, I was caught up in the shift that occurred within society's expectations for the purposes of education. In addition to the promotion of social values and as the exclusive base for solutions of complex social problems, the school's purposes

broadened to include complex social issues such as multiculturalism, media literacy and sexuality. Schools were increasingly viewed as vehicles for shifting public conscience: "gender inequity", "social class", "innate or acquired ability", "effort and circumstance" were incorporated; heterogeneous ability grouping replaced grouping by aptitude (Apple 1991). The expectation was for schools to treat everyone as an individual; to achieve equity not achievable elsewhere. The disparity between schools and the rest of society focused with clarity on issues such as violence. While pressures to enforce a "zero tolerance policy" existed within schools, the violence against women and infused in media and video games reflected the extreme contrast between schools promoting civilized values within an increasingly uncivilized society (Barlow and Robertson 1994: 7).

The shift from pro-social orientation to damage control meant schools were expected to counteract social change. As the increased uncertainty and anxiety within the population escalated through the 1980s, schools became increasingly targeted as the scapegoat for society's ills. Criticisms treated outcomes rather than initial problems resulting in 'band-aid' intervention. For example, child poverty was attributed to poor nutrition and learning impediments rather than acknowledgment of the broader problems of increases in adult poverty; increases associated with race, and the subsequent examination of how wealth is generated and protected within the political and economic realms of our society. With increased intellectual, emotional and social demands on schools in an increasingly polarized and disparate environment, questions of "student marketability" were raised. More educated, affluent parents began to query the 'sacrifices' of their children's

academic achievements because of the heterogeneous inclusions with those of lower socio-economic class. The propagation of these criticisms was felt within parent groups, media and business. The weight of business criticism that schools were failing to provide adequately trained young people to the workforce combined with negative perceptions of teachers fueled an inclusion of attacks which centred on issues of gender politics. Teacher stereotypes equated with the perception of "teaching as women's work" led to the polarization of feminine characteristics of 'softness and laisse faire' pitted against the masculine 'hierarchical punitive disciplinary actions' within business. Consequently, the issues of gender politics in the schools' willingness to accept responsibility may relate to "women's alleged willingness to be all things to all people" (Barlow and Robertson 1994: 11).

At the same time, not only were the schools being downloaded responsibility for society's ills, the increase has occurred within a climate of economic restraint. As Barlow and Robertson (1994) point out, Federal support to provinces and territories declined in excess of $35 billion by 1995. In addition, declining revenues from tax bases are being experienced by individual provinces and territories. Greater dependency has shifted to local property tax, which is viewed as one of the "least progressive forms of taxation" (Barlow and Robertson 1994: 12). Localizing a larger portion of education taxes has raised increased public awareness of education costs resulting in pressure to reduce the costs of education without additional consideration for its needs or benefits.

In Alberta today, under the Klein government, politically laden messages delivered by way of budget cuts raise issues about the value of children and childhood, the role of 'quality-of-life' versus 'quality-of-education.' The pressure to ease society's unemployment and economic woes combined with political involvement in the form of task forces, reviews and royal commissions, has led to the current dilemma. Within provincial studies such as *Meeting the Challenge II: Three Year Business Plan for Education 1995/96 - 1997/98* are efforts to include and respond to stakeholders, including business communities. Each has "concluded that measuring and reporting on the performance of schools is a vital component of accountability and future prosperity" (Barlow and Robertson 1994: 14). The criteria for evaluating school performance is weighted in annual reports which measure student performance on provincial achievement exams.

It is this narrow, simplistic view of measuring school and student performance that is cause for concern regarding the future of education, not only in Alberta, but within all major industrialized countries throughout the world (Brown & Lauder 1992). To look forward to preparing today's youth for the future involves not only a deeper understanding of the necessity of re-thinking basic academic skills that are required in the workplace, but also the continuing necessity of non-cognitive domains such as civic responsibility, interpersonal and communication skills. Individualistic promotion on the basis of budget restraint and provincial achievement exams will not only continue to reciprocate past practices if carried through the present system of bureaucratic management. It will, at the same time, diminish educators' willingness to take risks, to be

creative and innovative in re-aligning educational organization and practices. For a future era that is currently in transition, catering to past values and ideals of bureaucratic practices will no longer suffice.

While Neil Postman (1995) asserts the negative aspects of economic utility as the dominant emerging narrative associated with schools and the larger global society where new technologies play an integral role, Zuboff (1988) argues the future holds two choices: to 'automate' present bureaucratic practices with de-humanizing consequences *or* to 'informate' through organizational non-bureaucracies thus transforming the workplace into a more democratic, participatory and humanistic environment. As Wirth (1992) argues, "High-tech firms ... are not served well by old organizational forms. Centralized rigid bureaucracies, whether in schools or industry, are hostile to creativity. They stifle it because their goal is to keep control in the hands of centralized authority. The essential obligation of organizations in the new era, however, is "to nurture creativity"" (p. 73).

The choice to automate or informate sparks discussion of what the underlying purposes of education are to be and ultimately, who holds control. Educational institutions can be perceived as institutions for universal education of the masses based on past centralized bureaucracies or they be perceived as democratic learning environments where all learners can truly be expected to demonstrate their capacities in all areas of intelligence; preparing them not only for the world of work but also as active participants in society. What is

called into question is whether the present institutional attempts at universal uniformity of curriculum and instruction are warranted in such an increasingly diverse pluralistic society.

As a result of my graduate studies, my ability to bridge theory to practice has been difficult. On the one hand, is an entity which values skills, knowledge and behaviours which are measurable. On the other hand, in the classroom, acceptance and respect for ideas generated through critical thinking and self-directed learning form the central motivation for learning and teaching. To place emphasis on outcomes without regard for personal well being within a classroom community leaves one with a very stark and sterile environment. To foster critical thought in my students requires a psychological immersion in their view of the world, connecting their experiences with those of the curriculum concepts. As I became more immersed in theory, I found myself distanced from the lives of my students and their every day responses. As I enter back into my world of work where directives come from the provincial government, the school board, administrators and parents, my role in the classroom is one which is being re-shaped. The dichotomy between what I have learned in theory and what I do in practice still remains somewhat illusive and cloudy. Accordingly, as I experience this period of change, my thoughts have centred around the following questions which I hope to answer in this thesis. First, "What is the nature of change that encompasses education in the 1990s?" Secondly, "What is the effect of change on schools?" Third, "How can an individual respond to these changes in education?"

Chapter 2

THE NATURE OF CHANGE

> At any given time in the symbolic universe of a community, there dwell multiple narratives - some shining in the forefront, vivid and unmistakable; some in the background, indistinct and half-forgotten; some sleeping, some recently awakened, and many in uneasy contradiction to others. (Postman 1995: 60)

For education in Alberta, the nature of change requires examination not only of what was and is occurring within society in general, but globally as well. For the purposes of this thesis, the focus will be on the shift in economic perspectives from Fordism to Post-Fordism. For most of the past century, economic and social policy has been modeled after Henry Ford's assembly line methods of mass production and mass consumption; policies which were very much a part of the way educational institutions were organized in the past and have remained into the present. Post-Fordism, on the other hand, is organized around a different perspective within which the economy, politics and industrial relations, culture and ideology are placed. In Post-Fordism, flexible specialization and decentralization of production replace mass marketing and mass production emphasizing flattened hierarchies with increased communication. For education, the manner in which the Post-Fordist perspective has pressured the educational institutions to respond to change has been dominated by economic ideals to maintain growth and prosperity. Thus the competitive edge required for business through its call for skilled workers has

superseded the school's purposes to produce informed citizens who can think critically about how their world is changing.

The province of Alberta is not an isolated example of the nature of educational change. Rather, the relationship between change found in Alberta and the rest of western industrial nations corresponds in an interrelated manner. With the subsequent moves over the past two decades to dismantle and re-shape nation-states, alternatives within political, economic, social and cultural realms have been put forward, each with its own agenda of ideals, principles and policies. In the political arena, Left Wing forces campaign against the Right; in economics, Keynesian and Post-Keynesian reforms have led to the transformation from Fordism to Post-Fordism, Industrialization to Post-Industrialization, the viability of an Information Society; and in the cultural and social realms, Modernity has transformed into Post-Modernity. Within each evolves ideologies of how to re-shape the consciousness of societies and communities in order to prepare them for a future within the increasing reality of a 'global society'. Of significance, are the values each ideology attaches to power, authority and control within which change should occur. It is the focus of this thesis to examine economic change; from Fordism to Post-Fordism which is not to say that other change does not occur. It is the tension between economic ideals for outcomes set against the social context in which schools operate that I wish to pursue. To bridge the cultural and social realms to economic principles and policies requires, first, an examination of the relationship between Modernity and Fordist-Keynesian ideals.

Questioning Modernity

During the closing decades of the twentieth century, the social and economic world of industrialized nations has been transformed in a number of significant ways which have directly influenced the way in which the role of education is perceived (Brown & Lauder 1992). Advances in new technology and communications, the technological ability to condense time and space and the accompanying extension of global economic markets has forced industrial societies to look beyond their borders to address the issue of sustainable economic growth. As nation states grapple with the complexity and immensity of the changes occurring, they look inward to their institutions and human resources to reinforce their global competitiveness (Brown & Lauder 1992). Consequently, the education system is a significant player in a nation state's drive to maintain economic prosperity. In the current period of economic crisis, it is the narratives associated with modernity which dictated the role of education during the Industrial Age that are shifting and changing in emphasis: narratives that are intimately tied to the way economic and social change were perceived in the past and are evolving at present.

Although the term "modern" has had a more ancient history, the intellectual efforts of Enlightenment thinkers during the seventeen and eighteenth centuries have largely formed the basis of 'modern' thought in contemporary times. The Enlightenment project sought to formulate a base from which to pin down the sense of "ephemeral and the fleeting"; to bring about something more "eternal and immutable" (Harvey 1989: 10). "At root, modernity rests upon Enlightenment beliefs that nature can be transformed and social

progress achieved by the systematic development of scientific and technological understanding, and by its rational application to social and economic life" (Hargreaves 1994: 25). Enlightenment thinkers have provided a philosophical and practical reference with which to determine the course of an age, one which was framed on

> objective science, universal morality and law and autonomous art according to their inner logic. The idea was to use the accumulation of knowledge generated by many individuals working freely and creatively for the pursuit of human emancipation and the enrichment of daily life. The scientific domination of nature promised freedom from scarcity, want, and the arbitrariness of natural calamity. The development of rational forms of social organization and rational modes of thought promised liberation from the irrationalities of myth, religion, superstition, release from the arbitrary use of power as well as from the dark side of our own human natures. Only through such a project could the universal, eternal, and the immutable qualities of all humanity be revealed" (Harvey 1989: 12).

The embrace of progress, the harnessing of knowledge and social organization celebrating human creativity, scientific discovery and individual excellence in the name of progress was meant to free the human condition. "Enlightenment thinkers welcomed the maelstrom of change and saw the transitory, the fleeting, and the fragmentary as a necessary condition through which the modernizing project could be achieved. Doctrines of equality, liberty, faith in human intelligence (once allowed the benefits of education), and universal reason abounded" (Harvey 1989: 13). The Enlightenment project presumed the existence of only one possible answer to any one question. Consequently, it followed that the world could be controlled and rationally ordered once a single correct representation

could be uncovered. It was through this belief, that scientific and mathematical endeavors sought to provide the means by which Enlightenment ends were to be achieved.

Throughout the sixteenth and seventeenth centuries, a parallel train of thought followed through to the institutionalization of education. From the division of students into specific classes dependent on their age and the knowledge required (beginning as early as 1509) to the use of curriculum to reinforce Calvinist discipline and social practice, and the use of mass education to elicit social organization and control, the role of education as a reflection of the needs of society in which it resided remained prevalent. Hamilton (1980) describes the significance of the development of curriculum as a means of social organization and control in the sixteenth and seventeenth centuries:

> the notion of classes came into prominence with the rise of sequential programmes of study which, in turn, resonated with various Renaissance and Reformation sentiments of upward mobility. In Calvinist countries (such as Scotland) these views found their expression theologically in the doctrine of predestination (the belief that only a preordained minority could attain spiritual salvation) and, educationally, in the emergence of national but bipartite education systems where the 'elect' (i.e. predominantly those with the ability to pay) were offered the prospect of advanced schooling, while the remainder (predominantly the rural poor) were fitted to a more conservative curriculum (the appreciation of religious knowledge and secular virtue). (cited in Goodson 1989: 15)

Not only did the development of curriculum from this perspective allow the power to designate what occurred, it also provided the means to differentiate the students' access to

what was taught based on social class. Consequently, the connection between 'class' pedagogy and a curriculum based on a prescribed sequence became clear.

The Industrial Revolution in the late-eighteenth, and early-nineteenth century witnessed a shift in industrial management from domestic to factory production which was intimately related to a parallel transition in the administration of schools.

> In the pre-industrial family of a craftsman, the parents themselves are responsible for teaching the child minimum occupational skills, as well as for his emotional molding during his early years. When a growing economy places demands for greater literacy and more technical skills, the pressure is for this multi-functional family to give way to a new, more complex set of social arrangements. Structurally distinct educational institutions appear and the family begins to surrender some of its previous training functions to these new institutions; having lost these functions, accordingly, the family becomes more specialized, focusing relatively more on the emotional conditioning in the early childhood years and relatively less on its former economic and educational functions. (Smelser 1968 cited in Goodson 1989: 15)

The separation of the family unit from its responsibility for foundations of educational and occupational skills led to the insertion of state schooling and replacement of the 'class' system to the 'classroom' where larger numbers of students could be supervised and controlled. "Hence 'the change from class to classroom reflected a more general upheaval in schooling - the ultimate victory of group-based pedagogies over the more individualized forms of teaching and learning'" (Goodson 1989: 16). The reflection of broader political and economic ideals through the separation of mental and manual labour opened the

possibility of a more cohesive hegemonic ordering of industrial society towards the achievement of progress and prosperity.

By the 1850s, educational pedagogy and curriculum was joined together with a third element; evaluation. Bernstein (1971) cited in Goodson (1989: 16) argues the "pedagogy, curriculum and evaluation considered together constitute the three message systems through which formal educational knowledge can be realized, in this sense they constitute a modern epistemology." Consequently, by the turn of the twentieth century, University examinations evolved which accredited students to the "gradations of society." The power to "differentiate" based on "examinable knowledge" which was reinforced by an academic subject-based curriculum remains the "social and class basis for differentiation" within current educational institutions. Although the "rationale and mechanism for differentiation" have fluctuated to varying degrees throughout the events of the twentieth century, differentiation remains constant (Goodson 1989: 19).

As Harvey (1989) argues, "modernism from its very beginning, therefore became preoccupied with language, with finding some special mode of representation of eternal truths. Individual achievement depended upon innovation in language and in modes of representation" (p. 20). In education, the demands of the economy for increased literacy and technical skills reinforced the techno-scientific mind-set. In Lyotard's (1984) view, modernity strengthened the legitimacy and acceptance of singular beliefs, referred to by Lyotard and others as metanarratives. For example, the singularities of master narratives

found in society, and ultimately the organizational structure of education, were upheld in its views of truth, reality, progress, goals, rationality, unity and totality, subjectivity, objectivity, and ends-means. Aoki (1993) offers the following as an indication of how deeply these grand narratives have been infused within our consciousness:

> legitimacy of the master stories about "progress" (progress is always good for us); about "goals" (we as humans are driven by goals); about "rationality" (by sound reasoning we can arrive at all truths); about "truth" (somewhere there is a thing called "the truth," which, by our striving, we can discover); about "unity" (unity is not only possible but desirable; hence we should strive to connect things and people into a totality); about "ends-means" (our world is striated technically; everything boils down to ends-means.)

Harvey (1989) argues that with the passage of events in the twentieth century - with its militarism, two world wars, death camps and threat of nuclear annihilation - the optimism of the Enlightenment project shifted to the questioning of its transformation from that of a quest for human emancipation into a system of universal oppression and dominance. Throughout the Enlightenment project there remained a critical examination of the contradictions between the means with which the utopian plan was envisioned and the ends; ends which reflected emancipation to some, oppression to others.

> Modernism internalized its own maelstrom of ambiguities, contradictions, and pulsating aesthetic changes at the same time as it sought to affect the aesthetics of daily life ... It is important to keep in mind, therefore that the modernism that emerged before the First World War was more of a reaction to the new conditions of production (the machine, the factory, urbanization), circulation (the new systems of transport and communications), and consumption (the rise of mass markets, advertising, mass fashion) than it was a pioneer in the production of such changes. (Harvey 1989: 22, 23)

The conflict between utopian ideals and the experiences of individuals was reflected in education. Although alternative forms of schooling for all social classes (individualized learning, home schooling, private schools) existed prior to the Industrial Revolution and continued to a degree after its transformation, the main thrust of "school curriculum was often overlaid by social control concerns for the ordinary working populace" (Goodson 1989: 23).

> The model of curriculum and epistemology associated with state schooling progressively colonized all educational milieux and established itself some time in the late-nineteenth century as the dominant pattern. The subsequent linking of this epistemology to the distribution of resources and the associated attribution of status and careers stands at the center of the consolidation of this pattern. The assumption that curriculum should be primarily academic associated with university disciplines has been painstakingly worked for and paid for... At root such a hierarchical system is often seen as denying the dialectic of education, the notion of dialogue and flexibility which some viewed (and view) as central to the way we learn. This mutuality is deliberately denied if 'subject matter is in large measure defined by the judgments and practice of the specialist scholars' and 'students are initiated into a tradition; their attitudes approaching passivity and resignation'. The rhetoric of the 'discipline' and the academic subject might therefore be seen as characterizing a particular mode of social relations. (Goodson 1989: 23)

The tension between control of the social classes and beliefs about how we as human beings learn continues to lead contemporary writers to question the notion of hegemony. Williams (cited in Apple 1979: 5), discusses the "notion of hegemony as deeply saturating the consciousness of a society"; one which leads to " a whole body of practices and

expectations; our assignments of energy, our ordinary understanding of man and his world. It is a set of meanings and values which as they are experienced as practices appear as reciprocally confirming." The "particular mode of social relations" (Goodson 1989) leads us to examine the occupational structures through which the class consciousness was to be groomed. With the rise of tensions between World War I and World War II, the "fading of Enlightenment beliefs and the emergence of perspectivism left open the possibility of informing social action with some aesthetic vision ... the 'universal' or 'high' modernism that became hegemonic after 1945 exhibited a much more comfortable relation to the dominant power centres in society" (Harvey 1989: 35).

What did the dominant power centres in society emphasize? By the inter-war years, the separation of economic production and human reproduction; one where family and workplace no longer worked together as a unified whole, was reinforced in how education viewed its role. "The belief 'in linear progress, absolute truths, rational planning of ideal social orders' under standardized conditions of knowledge and production" brought about a form of modernism that was "positivistic, technocentric, and rationalistic" (Harvey 1989: 35). The association between academic subjects and university disciplines was rationalized by the emphasis on students' intellectual abilities, granting priority to a "triple alliance between academic subjects, academic examinations and able pupils" (Goodson 1989: 19). Consequently, grammar schools were associated with students who would enter "learned professions or ... higher administrative or business posts"; technical schools would be available for students whose interests were in "applied science or applied art";

and for those students who dealt "more easily with concrete things than with ideas ... a practical curriculum" would be provided for their future in manual occupations.

With the experiences of World War I, the 1930s Depression, and World War II, concerted efforts were put forward to maintain the ideals of modernity. The post World War II development and political-economic stabilization efforts, referred to as high modernism were organized under an international power system, known as Fordism and Keynesianism. The results of this effort succeeded in its ability to infuse "corporate bureaucratic power and rationality, under the guise of a return to surface worship of the efficient machine as a sufficient myth to embody all human aspirations" (Harvey 1989: 36). It is on this note that we turn our attention to what Fordism and Keynesianism entails.

Fordist-Keynesianism

Under the auspices of modernity and modernism with its saturation of public consciousness of the grand narrative, the postwar boom from 1945 to 1973, "was built upon a certain set of labour control practices, technological mixes, consumption habits, and configurations of political-economic power ... this configuration can reasonably be called Fordist-Keynesian" (Harvey 1989: 124); a political-economic capitalist model adopted by countries throughout the industrialized world following the second World War.

Fordism can be traced to the introduction of Henry Ford's methods of mass production and social organization in the early 1900s when he initiated "his five-dollar, eight-hour day as recompense for workers manning the automated car-assembly line" (Harvey 1989: 125). The assembly-line production of Fordism was adopted by dominant corporate bureaucracies as the vehicle through which economic perseverance of mass production and mass consumption could be achieved. By providing a flow of work past a stationary worker, Ford achieved immense gains in productivity. With the compliment of F.W. Taylor's administrative management principles which promoted labour productivity through the organization of the fracturing of work tasks into sequenced, fragmented motions, the result became "the separation between management, conception, control, and execution" (Harvey 1989: 125) within the production process.

Fordism was more than an economic model; it was encompassed as a social model of organization as well. The implementation of assembly line efficiency (Fordism) and labour management (Taylorism) was reinforced by Weberian changes (the total authority of the state to counsel obedience from its citizens) in the bureaucracy of business and the organization of government. It was the combination of intensive accumulation and monopolistic regulation which regulationists view as constituting Fordism.

In reference to the social critic, Gramsci (1971), who in his prison notebooks at the beginning of the 1930s introduced the notions of 'Americanism and Fordism' to explain what he perceived as a new historical 'epoch' or 'passive revolution'(p. 279-318),

regulationists adopted an extremely broad definition of Fordism, encompassing not only an industrial or technological paradigm but also a particular institutionalized 'way of life'.

What marked the adoption of Ford's vision was his "explicit recognition that mass production meant mass consumption, a new system of the reproduction of labour power, a new politics of labour control and management, a new aesthetics and psychology, in short, a new kind of rationalized modernist, and populist democratic society ... a full-fledged regime of accumulation" (Harvey 1989: 126). Fordism provided the rationalization through which social and technical control in education, as in all aspects of society, operated.

Theoretical frameworks aimed at validating and explaining areas of economic organizational principles include a variety of perspectives. One such theory, the regulation theory, offers a more general, although abstract, attempt to analyze the complex processes of social change within a framework which relates economic, social, political and ideological structures. Regulation theory explains capitalism "in the form of 'regimes of accumulation' involving specific 'modes of regulation' which offer resolution, albeit always a limited and provisional one, of the underlying contradictions of capitalism" (Burrow, Gilbert & Pollert 1992: 2). Pioneered in France in the 1970s and refined by political economists in the 1980s, the regulation approach aims to explain the dynamics of long term economic cycles which offer stability or change. Although there are many diverse theories within this approach (from Marxian value theory to Keynesian

Macroeconomics), the central purpose seeks to generate a framework that can explain "the paradox within capitalism between its inherent tendency towards instability, crisis and change, and its ability to coalesce and stabilize around a set of institutions, rules and norms which serve to secure a relatively long period of economic stability" (Amin 1994: 7). For regulation theorists, it is the Fordist-Keynesian models which have provided the capitalist stability experienced internationally from 1945 to 1973.

Regulation theory involves discussion of the post World War II boom in terms of a 'Fordist regime of accumulation'. For example, mass production is supported by mass consumption and the Keynesian welfare state. Two overriding concepts guide regulation theory: The 'regime of accumulation' refers to the regulations within the economy as a whole which enables a more or less coherent process of capital accumulation. Included in this area would be accepted norms within the organization of production and work; relationships between branches of the economy; rules of industrial and commercial management, principles of income sharing between wages, taxes and profits; norms of consumption and patterns of demand in the marketplace and other aspects of the macroeconomy (Amin 1994: 8).

The 'modes of regulation' refer to the institutions, their laws and agreements; the complexity of cultural habits and norms which secure capitalist reproduction. The formal and informal rules of social relationships relate to applications within law, state policy,

political practices, industrial codes, governance philosophy, rules of negotiation and bargaining, cultures of consumption and social expectations (Amin 1994: 8).

Three additional concepts further specify 'regimes of accumulation' and 'modes of regulation' to identify variables of a cohesive system. The 'dominant industrial paradigm' or 'labour process' identifies patterns within the organization of industry and work; its nature of technology, management rules, division of tasks, industrial relations and wage relations. Secondly, analysis occurs in 'mode of development' to identify the total pattern of development in the economy based on the industrial paradigm or modes of accumulation and regulation. Third, is the 'mode of societalization' or 'societal paradigm' which analyzes political reconciliation, social affiliations and dominating hegemonic processes which feed into a pattern of mass integration and social cohesion, thus supporting and stabilizing development (Amin 1994: 8).

The postwar integration of 'intensive' accumulation and 'monopolistic' regulation became the foundation of the universal and fully integrated Fordist system of capitalist development experienced internationally. "The move to a regime of intensive accumulation meant that the continued growth of capitalist economies had become dependent, not only on dynamic production goods sectors (the precondition for extensive accumulation), but also on dynamic *consumption goods* sectors. The move to monopolistic regulation meant that workers were fully rather than partially integrated into capitalist systems as both producers *and* consumers" (Meidner 1990: 30). Consequently,

the 'Golden Age' of capitalism was based on the effective linking of wages to increasing productivity; a new wage-labour relation which meant workers gained recognition from their employers for organizing labour-power as well as securing reciprocal purchasing-power. De Vroey (1984) summarizes the general pattern:

> In most countries, the golden age was a period of social consensus, interrupted by only short phases of social upheaval. Capitalist societies had not of course foregone their invariable features: exploitation and domination were still present. However, two main classes, employers and wage earners, had come to a mutually political collective position. Regular increases in wages gave them access to a consumption pattern undreamt of by their parents. Unemployment was low, while workers were provided with insurance systems and a network of collective goods and services ... For the capitalist class, the advantages were obvious: the attainment of social peace and class collaboration: minimizing halts in production and gaining outlets for increased production. (cited in Meidner 1990: 31)

The assurance of greater efficiency, productivity, and prosperity created workplaces and labour processes which, in fragmenting tasks and isolating management, resulted in the de-skilling of labour; the clear separation of mental and manual processes.

In summary, the preservation of the hierarchical bureaucracy of an education system, whose pattern of curriculum and epistemology for the masses was academic in nature, reinforced the social order and consensus so necessary for the success and maintenance of Modernist notions and Fordist-Keynesian economic policy. They have done so at a cost: to live within such a system of conformity has meant the lack of acknowledgment and

ability of learners to be engaged in environments where critical and creative thinking is valued.

Chapter 3

SOCIAL EFFECTS AND EDUCATION REFORM

Throughout the majority of the twentieth century, the effects of Modernist notions and Fordist-Keynesian economic policy has permeated all aspects of society including education. In his book *Changing Teachers, Changing Times*, Hargreaves (1994) argues the interrelationship between economic policy and educational policy. In his discussion of modernity, he asserts that the work associated with teaching, as in other workplaces, "has been defined and their powers of discretion delimited by the technical controls of standardized tests, "teacher-proof" curriculum packages and guidelines, and step-by-step models of teaching imposed from above ... measures designed to increase technical control have often ironically undermined it" (p. 26). The pattern reinforces the notion of the dominance of the empirical/analytical paradigm associated with types of science or inquiry during the postwar years. In reference to Jurgen Habermas' analysis of three paradigms of science or inquiry (Empirical/Analytical, Hermeneutic, and Critical), Schubert (1986) argues that the dominant use of the term *science* "in educational literature today is confined to the canons of replicability, validity, parsimony, and reliability and is usually associated with analyses of quantitative data derived from experimental and quasi-experimental research" (p. 180). This rigidity, combined with a positivistic, linear emphasis in policy formation, implementation and evaluation and further reinforced in the four Tylerian curricular categorizations (purposes, learning experiences, organization, and

evaluation) formed the foundation of the empirical-analytic mode of educational research which carried over into all areas of schooling.

> Even educational philosophy and other foundational studies adopted a rather technical application of concept analysis in the 1960s, derived from analytic philosophy. Together, the behavioristic psychologists and the concept analysts brought a technical rationality to educational scholarship. In the curriculum field, this technical rationality merged with the Tyler Rationale to make the perennial paradigm more mechanistic and positivistic. (Schubert 1986: 173)

The Empirical-Analytical science paradigm appropriately met the need not only of the political-economic capitalist intentions of Fordism regarding the social organization of work; it also suited the metanarratives associated with modernity. "Work implies a hierarchical structure in which certain individuals are granted control over others by virtue of their position in the bureaucracy ... they do so without questioning the ideological ramifications of their work. They are there to do their job" (Schubert 1986: 181). This mode of rationalization holds a confidence in the 'certainty of knowledge' not only in the role of educational research and inquiry but also in its saturation and infiltration throughout the educational bureaucracy as a whole. The values implicit within assume that "knowledge is value-free", can be "objectified", and as such can therefore be "made into a commodity to be delivered to others." In addition, social reality becomes the basis for "truth"; "to provide knowledge is to reflect the overt behavior or appearance of nature" (Schubert 1986: 182). The assumptions inherent within this paradigm were not to be questioned; thus pressure to conform was evident in how education was delivered to the masses.

In education, the periodization of the Fordist cycle of capital development resulted in fitting the occupational needs of the workforce as well as reinforcement of the social order through reforms in mass education. "On the one hand, mass education was won as a right by an increasingly franchised and politically organized populace. It entitled and enfranchised young people to have access to educational and social opportunities. On the other hand, mass education also trained the future labour force and sustained social order and control" (Hargreaves 1994: 27).

William Schubert (1993), in discussion of the historical perspectives associated with curriculum, identifies three main orientations which have persisted throughout the first two thirds of the twentieth century. Curriculum, stated simply as "whatever is advocated for teaching and learning" (p. 81), is held to exist within the perspectives of "the intellectual traditionalist", "the social behaviorist", and "the experientialist". Within each position exists, to varying degrees and modified emphasis, the question of what constitutes worthy knowledge, in whose interests, and to what extent the continuation or discontinuance of the metanarratives associated with modernity are carried out. As the Fordist era continued through the 1950s and 1960s, education "emerged as factory-like systems of mass education" processing students in "batches", segregating them into "age-graded cohorts called *classes* or *standards*", within a standardized curriculum transmitted through "lecturing, recitation, question-and-answer and seatwork" (Hargreaves 1994: 27). The school served to initiate students into a surface fulfillment of someone else's destiny.

Although efforts associated with education reform (hermeneutic and critical paradigms for inquiry) were not dormant, their adoption into broader policy frameworks were overshadowed in the 1940s by war efforts and through the 1950s in times of crisis, such as the cold war and post-Sputnik pressures to 'catch up to the Russians', government pressures to return schools 'back to the basics' dominated progressive efforts at reform. By the late 1950s and early 1960s, the U.S. drive to gain a competitive edge resulted in "funding [that] had to be justified as fulfilling defense needs, rather than educational needs alone. To use the money well, it was deemed necessary to act quickly and to bring in psychologists and other social scientists, if not to completely replace educators, then to at least tap sources thought to be more credible than those who had contributed to the current state of affairs" (Schubert 1993: 99).

The paranoia and scapegoating of educators, placing blame squarely on their shoulders for the deterioration of military power and space exploration, reinforced the social behaviorist drive to "teacher proof" materials and methods. Pressure to reinforce and transmit predetermined recipes dominated the field although "the goals of inquiry - insight into the structure of the disciplines, and enhanced problem solving in science and other subjects - were rarely realized" (Schubert 1993: 101). Achievement evaluations indicated little improvement in student performance, and in analysis, it was found that the curriculum reform packages had not failed; rather "behind the rhetoric of reform, they found little reformed practice; traditional practice still dominated the scene" (Schubert 1993: 101).

The high modernism of postwar development and political-economic stabilization efforts, with its "corporate bureaucratic power and rationality", began to fade as the counter-cultural and anti-modernist movements of the 1960s came to life.

> Antagonistic to the oppressive qualities of scientifically grounded technical-bureaucratic rationality as purveyed through monolithic corporate, state, and other forms of institutionalized power (including that of bureaucratized political parties and trade unions), the counter-cultures explored the realms of individualized self-realization through a distinctive 'new left' politics, through the embrace of anti-authoritarian gestures, iconoclastic habits (in music, dress, language, and lifestyle), and the critique of everyday life ... It was almost as if the universal pretensions of modernity had, when combined with liberal capitalism and imperialism, succeeded so well as to provide a material and political foundation for a cosmopolitan, transnational, and hence global movement of resistance to the hegemony of high modernist culture ... Somewhere between 1968 and 1972, therefore, we see postmodernism emerge, as a full-blown though still incoherent movement out of the chrysalis of the anti-modern movement of the 1960s" (Harvey 1989: 38).

In education, the 1960s and early 1970s witnessed a steady growth in the field of curriculum; one which challenged the dominance of empirical-analytic rationality. These were times "of questioning authority; of grass roots political action; of steadfast consumer activism; of debate over what was worth fighting for; and of how to achieve greater equity, justice, and human well-being" (Schubert 1993: 102). Revival of experientialist positions fueled by publication of first-person accounts of what constituted worthwhile knowledge and learning lead to alternative models for schools, 'humanistic curriculum', 'affective instruction', 'nongraded school organization', 'values clarification' and the like.

Diversity of curriculum orientations from notions of "hidden curriculum", to debates on the "structure of the disciplines" and "ways of knowing" flooded the curricular landscape. According to Schubert (1993), of major influence during this period was the formulation of "practical, quasi-practical, and eclectic" forms of inquiry put forward by Joseph Schwab who summoned the need for "broadening curriculum inquiry from an almost exclusive reliance on the "theoretic", which looks for problems in generalized categories, uses methods geared to seek law-like statements about education, and finds its ends in knowledge production or publication" (p. 105).

By 1973, the emerging pluralism of the preceding decade, with its countercultural and anti-modernistic sentiments, met headlong with a global economic recession which shook to the roots the very essence of capitalism itself. The relative social, psychological, political and economic stability the Fordist-Keynesian regime had maintained as a "total way of life" was in crisis. Fordism, where "mass production meant standardization of product as well as mass consumption" in combination with a whole new aesthetic and a "commodification of culture" and infinitely tied to the aesthetic of modernism with its inclinations for "functionality and efficiency" was beginning to crumble (Harvey 1989: 135). The inability to control price-fixing markets for production and consumption filtered through a complex series of processes into the ability of the state to provide collective goods (defense, education, social and physical infrastructures); goods which cannot be produced or sold through the market. The dominant market power by large corporations and other powerful institutions to directly or indirectly drive the capitalist

direction combined with the difficulty of converting individual's abilities to do active work has brought about a structural transformation which, in capitalist terms has been described by some as a shift from Fordism to post-Fordism; as a social condition, a shift from modernity to post-modernity; and in cultural terms, a shift from modernism to post-modernism. The complexity with which this transformation affects our identity as individuals and as a society, is an enormous task; one which brings our existence as a civilization, our reasons for being into question.

Post-Modernity

Writers like Foucault and Lyotard argue that modernism collapsed at varying junctures throughout the twentieth century. If they are correct, then much of the preceding economic, political and social analysis may be misconceived, if not erroneous. Consequently, I will briefly sketch a rough definition of post-modernism to enable the reader to distinguish between the various arguments and their effects on education.

Foucault and Lyotard clearly reject any notion that there might be a meta-language, meta-narrative, or meta-theory through which all things can be connected or represented. Accordingly, universal or eternal truths cannot be determined and the totality of meta-narratives is substituted with the plurality of 'power-discourse' (Foucault) or 'language games' (Lyotard). In an era of transition, Lyotard (1984) argues

> Simplifying to the extreme, I define postmodern as incredulity toward metanarratives. This incredulity is undoubtedly a product of progress in the sciences: but that progress in turn presupposes it. To the obsolescence of the

> metanarrative apparatus of legitimation corresponds most notably the crisis of metaphysical philosophy and of the university institution which in the past relied on it. (p. xxiv)

For Foucault the central argument rises from the relation between power and knowledge; his conclusions indicating that "there is an intimate relation between the systems of knowledge ("discourse") which codify techniques and practices for the exercise of social control and domination within particular localized contexts" (Harvey 1989: 45). So it is that by registering repression within the human body, Foucault's analysis insists that there is no scheme which can escape the relation of power and knowledge in a non-repressive way. The pessimism of Foucault is echoed by Max Weber's view of the human capacity to avoid the 'iron cage' of repressive bureaucratic-technical rationality. The only avenue of exploration in Foucault's belief, rests on the open qualities of human discourse, thus intervening in the way knowledge is produced and constituted at the particular sites where a localized power-discourse prevails. The question of the effectiveness of localized, pluralistic practices on the repressive capacities of global capitalism remains unclear; specifically whether localized struggles might combine to form a progressive rather than regressive offensive on the central forms of capitalist exploitation and repression.

Lyotard (1984) argues on similar grounds, though from a rather different perspective. He takes the modernist preoccupation with language arguing that while "the social bond is linguistic", it "is not woven with a single thread" but by an "indeterminate number" of "language games". The 'atomization of the social into flexible networks of language

games' suggests that each of us resorts to a variety of rules depending on the situation we find ourselves in (at home, at school, in the community, at work).

Where, in the past, the prosperity of nation-states relied on agriculture followed by an age of machines, today's industrialized societies increasingly express economic success in terms of the production and dispersal of knowledge (OECD 1989) . Lyotard, like Foucault, concurs that "knowledge is the principal force of production" so the problem becomes defining the locus of that power when it is evidently "dispersed in clouds of narrative elements" within a heterogeneity of language games. Like Foucault, Lyotard accepts the open qualities of ordinary conversations in which rules bend and shift so as 'to encourage the greatest flexibility of utterance', at the same time discussing the contradictions between this openness and the rigidities with which institutions (Foucault's 'non-discursive domains') set the boundaries of discourse.

> The realms of law, of the academy, of science and bureaucratic government, of military and political control, of electoral politics, and corporate power, all circumscribe what can be said and how it can be said in important ways. But the 'limits the institution imposes on potential language "moves" are never established once and for all,' they are 'themselves the stakes and provisional results of language strategies, within the institution and without.' We ought not, therefore, to reify institutions prematurely, but to recognize how the differentiated performance of language games creates institutional languages and powers in the first place. If 'there are many different language games - a heterogeneity of elements' we have then also to recognize that they can 'only give rise to institutions in patches - local determinism.' (Harvey 1989: 47)

The local determinisms can be understood as communities of "producers and consumers of particular kinds of knowledge, of texts, often operating within a particular institutional context (such as the university, the legal system, religious groupings), within particular divisions of cultural labour (such as architecture, painting, theatre, dance), or within particular places (neighbourhoods, nations, etc.). Individuals and groups are held to control mutually within these domains what they consider to be valid knowledge" (Harvey 1989: 47).

Consequently, there are no single truths to guide the transition to a new age. With the use of new technologies and global communication, economic initiatives intersect in multiple combinations with a variety of institutions within local contexts. As Harvey asserts, "I think it important to accept the proposition that the cultural evolution which has taken place since the early 1960s, and which asserted itself as hegemonic in the early 1970s, has not occurred in a social, economic, or political vacuum" (Harvey 1989: 63). The same holds true for varying perspectives threaded throughout Post-Fordist economic theory.

Post-Fordism

Three theories of post-industrialization - the information society, post-Fordism, post-modernism - have emerged over the past three decades and overlap one another with varying degrees of emphasis although common elements occur throughout. For example, information technology frames the information society theory but is also central to the other two. Globalization, decentralization and diversity are also prevalent in all three.

What distinguishes each is the underlying framework with which they view the issues. Where Post-Fordism emphasizes the capitalist "relations of production" (in which information technologies retain varying degrees of emphasis), the 'Post-Modern Condition', as illustrated by Lyotard (1984), focuses on a broader framework of legitimation and delegitimation of the grand narratives and their consequence within the transition to the postindustrial and postmodern age. In Lyotard's view, the use of knowledge will increasingly become the major force of production. As a commodity, knowledge will increasingly be produced to be sold; ceasing to be an "end in itself" and becoming "the principle force of production." In effect, an "exteriorization of knowledge with respect to the "knower", at whatever point he or she may occupy in the knowledge process" (Lyotard 1984: 5).

> The old principle that the acquisition of knowledge is indissociable from the training of minds, or even of individuals, is becoming obsolete and will become ever more so. The relationship of the suppliers and users of knowledge to the knowledge they supply and use is now tending, and will increasingly tend, to assume the form already taken by the relationship of commodity producers and consumers to the commodities they produce and consume - that is, the form of value. Knowledge is and will be produced in order to be sold, it is and will be consumed in order to be valorized in a new production: in both cases, the goal is exchange. Knowledge ceases to be an end in itself. (Lyotard 1984: 4)

The combined erosion of the grand narratives associated with modernity and the commodification of knowledge through new technologies have coincided with the movements in Post-Fordism. The differences between Fordism and Post-Fordism, stated

simply, are the perspectives within which the economy, politics and industrial relations, culture and ideology are placed. In the *economy*, the rise of global market and global corporations are equated with deterioration of national enterprises and the nation state as units of production and regulation; flexible specialization and decentralization of production replace mass marketing and mass production; flattening of hierarchies emphasize communication rather than mandate within organizations; vertical and horizontal organization will continue to decay with an increase in sub-contracting, franchising, internal marketing; and a rise in the number of flex-time, part-time, temporary, self-employed and home-workers. In *politics and industrial relations*, appear fragmented social classes, weakening of national class-based political parties and class voting; the rise of social movements and 'networks' based on region, race, gender, single issue politics; marginal subnational and supranational movements; descent of mass unions and centralized wage bargaining and the rise of local, plant-based bargaining; a labor force divided into 'core' and 'periphery'; the end of the corporatist class compromise; the fragmentation and dissolution of standardized welfare provision, and the rise of consumer choice and private provision in welfare. In *culture and ideology*, the promotion of individualist modes of thought and behavior; a culture of entrepreneurialism; the termination of universal standardization in education with a rise in 'modularity' and pupil - parent choice; fragmentation and multiple values and lifestyles; post-modern eclecticism, and populist approaches to culture; privatization in domestic and leisure pursuits (Kumar 1992: 68).

As Kumar recounts, one of the central causes of the movement towards productive decentralization was the increased consumer demand for a variety of customized goods in limited quantities. Where Fordism offered unparalleled ability to produce goods cheaply and on a mass scale, the Post-Fordist movement has answered the demands for diversity in consumer market. This diversity relates not only to consumption habits. It has also permeated the social and cultural realms of societal change. With the imbalance of the present over-production and under-consumption within the mass market, the pattern of 'flexible specialization' has occurred. Flexible specialization depends on flexible technology. Numerically controlled machine tools are non-specialized and universal so adjustment for new designs and products is accommodated by simple changes in the computer controlled programmes that guide the tools. Flexible specialization summons the need for skill and flexibility within the worker as well which has led to the notion of the renaissance of craft production (Kumar 1992: 63). The move towards self-governing, self-regulating work groups is based on the belief that it is possible to continue within the declining Fordist model or move towards reform via flexible specialization. The notions of flexibility and diversity impact education through the call for a more innovative, creative and flexible individual capable of transferring complex thinking strategies and skills into a myriad of novel situations.

Similar to the transitory nature of the postmodern condition, rather than a single theorization of historical evolution and change, the post-Fordist debate is exactly that; a debate which concerns the nature and direction of change. The transition from the Fordist

phase of "capitalist development in the post-war period has given rise to another thirty to fifty year cycle of development based on very different economic, societal and political norms" (Amin 1994: 3). Within the debate is a search for identification of the driving forces within each historical phase with the acceptance that history *can* be periodized into distinct phases; accordingly, that there are periods of transition and uncertainty between new phases. As stated earlier, the present transition period has been under way since the mid-1970s. Within post-Fordist debate, the arguments appear to centre around "the nature of the passing age, the origins of its crisis, the bearers of change and the shape of things to come" (Amin 1994: 3). What is becoming clear is a crystallization of several strands of perspectives within one broad theorization of change; strands which, in some cases, act as cohabitants within one approach. For example, in explaining Thatcherism, Hall (1988) synthesizes the massive irrevocable and intrinsic changes which have occurred in Britain:

> A shift to the new 'information technologies'; more flexible, decentralised forms of labour process and work organisation; decline of the old manufacturing base and the growth of the 'sunrise', computer-based industries; the hiving off or contracting out of functions and services; a greater emphasis on choice and product differentiation, on marketing, packaging and design, on the 'targeting' of consumer by lifestyle, taste and culture rather than by categories of social class; a decline in the proportion of the skilled, male, manual working class, the rise of the service and white-collar classes and the 'feminization' of the work force; an economy dominated by multinationals, with their new international division of labour and their greater autonomy from nation state control; and the globalisation of the new financial markets, linked by the communications revolution. (Hall 1988: 24 cited in Amin 1994: 4)

The resulting synthesis of post-Fordism in Britain not only includes the economy; it encompasses broader social and cultural changes as well: in effect, a different way of thinking about how Western societies will evolve. With post-Fordism appears increased fragmentation and pluralism, debilitation of "collective solidarities and block identities and the emergence of new identities associated with greater work flexibility, the maximisation of individual choices through personal consumption" (Hall 1988: 24 cited in Amin 1994: 4). At present, within education, an economy driven, free-market ideology drives the decisions regarding where, how and when education is delivered and may be played out. In Alberta, the introduction of de-regulatory mechanisms, business involvement, technological initiatives, regionalization, accountability frameworks, greater choice granted through charter schools and strengthened parent voice are a few examples of how reforms have initiated the fragmentation of the assumptions associated with the collective, egalitarian notions of public education.

It must be kept in mind, however, that it is not so much that post-Fordist organizations play a different game; rather, the same game is played differently. Where Fordism emphasized mass production and consumption, 'public provision' and 'modernist cultural forms', post-Fordism is characterized in terms of balanced links between "'flexible' production techniques, differentiated and segmented consumption patterns, a restructured welfare state and post modernist cultural forms" (Burrow, Gilbert & Pollert 1992: 3). Thus, Post-Fordism has been conceptualized as a means to attain greater economic flexibility. For example, Boyer (1988) lists five aspects of this new flexibility:

"adaptability of productive organizations; ability of workers to move from one job to another; laxity of legal constraints governing the contract of employment; adaptability of wages; and the possibility for companies to reduce some of their social and fiscal payments" (ibid.: 3).

It is the way in which information technology, globalization, decentralization and diversity drives current economic policy which has saturated the social and cultural fabric of society causing a ripple effect in the diversity of reform movements in education. The chaotic feelings associated with swift and extreme change in perspectives has left the institution of education in disarray on all fronts.

Change in Education

The role of education in the presence of current rapid and radical change involves the consideration of a much broader social context through which schools operate; one that involves a confrontation between two powerful forces. Hargreaves (1994) argues that a dichotomy exists between an increasingly globally competitive postindustrial and postmodern world, characterized by accelerating change, intense compression of time and space, cultural diversity, technological complexity, national insecurity and scientific uncertainty set against a "modernistic, monolithic school system that continues to pursue deeply anachronistic purposes within opaque and inflexible structures" (Hargreaves 1994: 3). What Hargreaves articulates is the gradual transition from Fordism to Post-Fordism or another similar entity as the dominant economic model. Evidence of change is the

evolution of a different way of thinking about the role of education, the school, its teachers, and the learners it serves. One way of thinking about educational change is to focus on outcomes, a line of thought which is infused within Post-Fordist economic policy. Another way of thinking about educational change is to foster critical awareness in learners; to learn to think critically in a manner which ensures a body of informed democratic citizens whose skills, knowledge, and behaviours are adaptable to multiple situations and contexts.

The forces of change are messy and often confusing. In this case, it is the conflicting forces of change which place the importance of Post-Fordist economic policy alongside the schools' social policy to foster critical thinking. From my point of view as an educator, the primary goal for my students is to foster the growth of individuals who can think critically in order to make rational choices about their future; a future which holds unknown challenges for the way they will carry out their daily life.

In summary, the nature of change has involved a shift from Fordist-Keynesian economic policy to Post-Fordist economic policy; on the social and cultural front, a shift from Modernism to Post-Modernism. At present, functioning within this period of transition is an educational institution that is caught between the two paradigms. The question that surfaces is whether we can have a critical, humanistic education system within the context of an economic system which holds its institutions accountable for their outcomes.

The investigation of whether it is possible to foster critical thinking, innovation and creativity in the context of a Post-Fordist economy can be connected using Post-Fordist Flexible Specialization theory. To foster flexibility, creativity, innovation and entrepreneurship involves emphasis in schools on critical thinking, not only in relation to the cognitive domains but also within the non-cognitive domains. What remains of primary importance for western industrialized countries, faced with current pressures to compete in the global marketplace, are significant implications for existing patterns of how we as a society operate in relation to the concept of work and the re-shaping of social and cultural change. Within the realm of each aspect is the ability to foster diversity and de-massification. These patterns of work, civic responsibility, and critical thinking are directly linked to the role of education in its preparation of students for their future roles in society; many of which increasingly bridge the ideals of citizenship as productive members of society with economic purposes. Consequently, economic pressures to compete for the production of goods and distribution of services within the global marketplace, gained with the facilitation of new technologies, has caused an evolution in the way organizational bureaucracies, both public and private, operate.

Chapter 4

EFFECTS ON SCHOOLS

> It must be clear at the beginning that schools have not and have never been organized to create forceful, inspiring narratives. They collect them, amplify them, distribute them, ennoble them. They sometimes refute them, mock them, or neglect them. But they create nothing, and this is, I suppose, as it should be. (Postman 1995: 59).

Neil Postman (1995) asserts that two problems arise considering the role of education in such a climate of change. One is an engineering, or technical problem which involves the *means* through which students will learn; a complex relation which involves which is the best way to know, feel, see, remember, apply and connect things. The other problem involves the metaphysical; "to become a different person because of something you have learned - to appropriate an insight, a concept, a vision, so that your world is altered - that is a different matter. For that to happen, you need a reason" (p. 4). 'Reason' is interpreted as the central purpose for being; in this case, for being in school. In the current state of change, it is the primacy attached to economic purposes of schooling which has overshadowed the human and civic purposes which previously dominated educational philosophy and policy.

As a social institution, the school has been maintained as an important site in which to instigate, reflect and disperse social, political, economic and cultural change. There is no question that throughout the world schools are experiencing severe pressure to restructure

in order to meet the changing demands of the economic, political, social and cultural landscape in which they exist (Barlow and Robertson 1994, Hargreaves 1994). The faith in the effectiveness of the education system to reflect the demands of a modern industrial society through education systems that "emerged as factory-like systems of mass education" processing students in "batches", segregating them into "age-graded cohorts called *classes* or *standards*", within a standardized curriculum transmitted through "lecturing, recitation, question-and-answer and seatwork" (Hargreaves 1994: 27) reinforced the selection and training of students to fill occupational positions in a hierarchical division of labour.

A number of events indicate the dissolution of the Industrial Age which has carried us through the main part of the twentieth century; to be re-shaped by an age which currently is in its infancy. Whether or not education will remain in its present state or transform into something entirely different is yet to be seen. The reason, as Kilian (1995) would argue, is that "as a society we have out grown it; as an economy we cannot afford it; as individuals we do not often find what we need in it. As educators, we are failing to meet both our students' needs and our own. The crisis in education is really a crisis of the education bureaucracy" (p. 3). In times of change, schools have responded with an expanding bureaucracy which seems unable or unwilling to grasp the essence of the shift from Fordism to Post-Fordism. The crisis in education bureaucracy may be due to its inability to deal with change. If education responds to change with a top heavy bureaucracy, then real change, by that I mean learners responding by thinking, is unlikely to occur. The past

practices of students sitting in rows passively regurgitating fragmented information will no longer suffice in a rapidly changing, technological world.

It is in this light that the pluralism encountered in all aspects of society has caused us to question the relationships between existing foundations related to knowledge, power, and control. Education, the modern era of the teacher, the class, and the curriculum, is being dismantled and re-shaped both structurally and in modes of curriculum delivery. In Alberta, *Meeting the Challenge II: Three Year Business Plan for Education 1995/6 - 1997/8* clearly implicates a change of emphasis in who controls the future direction of education. Where once it was the privileged domain of educational professionals, education has now become "everybody's business".

To further the complexities with which educational institutions have been pressured to change is the influence of new information technologies which increasingly impact views of educational dependence on written text. Lemke (1993) argues that schools we have grown accustomed to have only existed for the past one and a half centuries. Thus, he finds it difficult to imagine them continuing in any recognizable form by the end of the twenty-first. Pointing to the dominant use of the textbook as the information technology of the modern era, he argues the use of read-only print will increasingly be supported by other modalities such as video, multimedia hypertext, and virtual realities in cyberspace; modalities accessible through current information technologies.

By referencing the reshaping of structural changes to public school systems - the administration, resources, and staffing - combined with changing modes of curricular delivery emphasizing intensive use of high-technology, current educational reforms could indicate what may be called a shift to post-Fordist practices in education.

With recent directives aimed at educational restructuring and reform, the choices schools make in response to the increasingly complex demands and expectations of various societal groups has led them to a situation where they cannot satisfy all demands. What may prove the catalyst for the transformation of schooling as is presently experienced, is the educational institutions' inability to service the needs of an increasingly pluralistic society; one which places demands for economic utility alongside social re-construction. As Daggett (1993a) argues, we cannot do both without concerted involvement of all sectors of society. Postman concurs with the need to involve all realms of society when discussing educational purposes:

> public schools do not reconstruct society on their own authority; they are given neither permission nor encouragement to promote a worldview that has no resonance in the society at large. Schools, we might say, are mirrors of social belief, giving back what citizens put in front of them. But they are not fixed in one position. They can be moved up and down and sideways, so that at different times and in different venues, they will reflect one thing and not another. But always they show something that is *there*, not of the school's invention, but of the society that pays for the schools and uses them for various purposes. This is why the gods of Economic Utility, Consumership, Technology, and Separatism are to be found in our schools now, exerting their force and commanding allegiance. They are gods that come from outside the walls of the classroom. (Postman 1995: 60)

In times of economic crisis, the pressure on schools to reflect change is premised on the argument that "the future is a race between education and disaster" (Barlow and Robertson 1994: 23); that our future success lies not only in the promotion of basic skills but is also rooted in reflecting the hopes, expectations, values, and social understanding of the larger society. Thus, in times of economic uncertainty, education has been the scapegoat through which blame for unemployment, racial intolerance, high taxation, and to some degree, growing crime have been placed. But despite waves of reform over the past century

> Schools have proven surprisingly resilient, rebounding to familiar shapes, styles and intellectual boundaries as soon as reformers turn their backs. Yet it is the very resilience that frustrates reformers that has also provided schools with remarkable durability. Few social inventions of our design remain so recognizable after a century as the classrooms of the 1890s and 1990s. (Barlow and Robertson 1994: 25)

In the Alberta Education document *Meeting the Challenge II: Three Year Business Plan for Education 1995/6 - 1997/98*, the founding principles to grant that "All Alberta students will have the opportunity to acquire the knowledge, skills and attitudes they need to be self-reliant, responsible, caring and contributing members of society" involves a number of key changes to the way education is perceived (p. 3). The emphasis on 'business plans' effectively shifts the importance of more child-centred orientations of the 1970s and 1980s to economic utility placing outcomes at the centre versus educating for critical thinking. While this may be the case in the present state of events, in the long term, emphasis on academic performance in the form of standardized tests at the expense

of metaphysical well-being will continue to evolve and shift. In the meantime, what has changed, and will continue to change, are the values placed on which skills today's youth will require in order to be successful in the world of work. In addition to the 'basic' skills, knowledge and behaviours which traditionally followed content and thinking within accepted realms of knowledge and metacognition, are higher order thinking skills which incorporate complex thinking processes. These higher order thinking skills are increasingly becoming a necessary learning competency in all aspects of everyday life. For example, within the realm of basic content thinking of accepted knowledge are the processes of problem solving, designing and decision making. With increased communication and new technologies, critical thinking (reorganization of knowledge fostering the processes of analyzing, evaluating and connecting) is required. In addition, within the realm of complex thinking is a generation of knowledge which fosters the processes of synthesizing, elaborating and imagining. For these foundational complex thinking processes to be valued in schools requires a concerted effort to focus on the goal-directed integration of both accepted, reorganized and generated knowledge (Daggett 1993a). By focusing on outcomes, the Alberta government has de-emphasized and de-valued the need to integrate higher order thinking skills in all areas of learning. Schooling must be more than achievement based on standardized test performance.

The response from the Calgary Board of Education has been to redesign its organizational structure in the form of concentric circles which seek to align more closely the formation of an educational model which fosters collaboration and communication amongst its

students, school administration, staff, parents and community constituents. This notion is reinforced in the Calgary Board of Education's statement of purpose which "as a public education system, ensures that quality learning is accessible to all its students" (Toward a Preferred Future...Three Year Education Plan 1996-1999: 2). Furthermore, in a culture of 'shared leadership' which emphasizes an 'efficient and effective learning organization', advocacy for 'equal opportunities' for every student to become a 'competent, productive, and self-directed citizen' is measured through a variety of means. By emphasizing *service* versus *sorting* and *purpose* versus *power* in a collaborative, interactive organization, the sharing of information regarding the system's performance includes not only test performance but other forms of broad-based assessment such as portfolios and authentic assessment. "The knowledge, skills, and attitudes of its students, and their commitment to lifelong learning are the primary measures of the Calgary Board of Education's effectiveness" (p.2). The C.B.E. redesign of its organization through focus on seeking understanding, respect of varying perspectives and positive problem solving of possibilities and alternatives is an attempt to terminate the continuance of a bureaucratic organization which has been characterized in the past as being harsh, unhealthy, disrespectful, and critical.

None of these pressures of increasing time compression, skill relevance, and equity, whether direct or indirect, modify the basic mission of education: in the case of Calgary Board of Education, it is to "ensure individual student development through effective education" (Toward a Preferred Future: 3). The commitment to the mission is

increasingly being reinforced by the expanding consensus regarding the importance of human capital and the growing knowledge-intensive networks required for sustained economic growth. But this support is not matched by a consensus with regard to what the policy response should be, other than the agreement that simplistic quantitative extension of existing educational transactions or the continued grounding in public monopolies will provide adequate solutions. The balance within the Calgary Board of Education is an attempt to shift from *growth* to *change*. The process of change within an organizational bureaucracy, however, is complex and requires a smooth interface between what currently exists and what will emerge as a result of the growing overlap between education and the economy. This is the heart of what the process of educational change is all about, keeping in mind that the process of change is very much impacted by the changes in society. These changes impact education significantly regardless of whether they influence it directly or indirectly. For educators, different ways of thinking about how to organize structurally involves querying whether change will value critical and complex thinking over budgetary issues. If money and performance outcomes are the bottom line in the redesign process without regard for validation of thinking skills and creativity, the bureaucracy will continue to reinforce past practices.

In conclusion, the effect of change on schooling fosters first, a compromise between the Post-Fordist aspirations for skill based outcomes and the educators' aspirations for learners involved in critical thinking. Secondly, within a growing educational bureaucracy, there is little ability to respond to change, thus the institution remains resistant to change.

Third, within a period of transition from Fordist-Keynesian to Post-Fordist economic policy lies a period of chaos and misdirection. The collapse of modernism is being replaced by the domination of post-modernism. For educators, it has become harder and harder to do the human things that schools are all about.

Chapter 5

HOW SHOULD AN INDIVIDUAL RESPOND: A THEORETICAL VIEW

> In a time of exploding change - with personal lives being torn apart, the existing social order crumbling, and a fantastic new way of life emerging on the horizon - asking the very largest of questions about our future is not merely a matter of intellectual curiosity. It is a matter of survival. (Toffler 1980: 22)

The models that have been presented thus far in this thesis presuppose a future which contains a world of work; whether it be in a similar format to the present or whether it will evolve and transform as well. Regardless of the balance between work and leisure, the intent of this chapter seeks to bridge theoretical perspectives on the changing nature of skills required not only in the world of work but also in relation to the quality of life for each individual within his/her daily life. The basic intent remains the same for education: to foster physical, psychological, emotional and social growth in learners so they can assume the role of informed, thoughtful citizens in a democratic society. What is to be kept in mind in this chapter and the next is the way skills, knowledge and behaviours are addressed: the way in which economic ideals, principles and practices for performance outcomes can be bridged and integrated with educational ideals for learners who are questioners and who are engaged in critical thought. It is my view that the response of the education system can not be more bureaucracy steeped with more reports and achievement exams. Without complex and critical thinking skills to provide an informed citizenry, the future of our collective communities will slowly wither.

In a time when economic, political, cultural and social uncertainty prevails, the response of some is one of bewilderment, denial and catastrophe. For others it is a challenge to seek possibilities for a redirection of vision for the future. In *The Third Wave*, Alvin Toffler views the present crisis and events in our lives to be interconnected. "They are parts of a larger phenomenon: the death of industrialism and the rise of a new civilization" (p. 18). What Toffler offers is a hope for a new direction; a synthesis of how the industrial civilization in which we grew up can be replaced to fit the needs of the emerging new era.

> So profoundly revolutionary is this new civilization that it challenges all our old assumptions. Old ways of thinking, old formulas, dogmas, and ideologies, no matter how cherished or how useful in the past, no longer fit the facts. The world that is fast emerging from the clash of new values and technologies, new geopolitical relationships, new life-styles and modes of communication, demands wholly new ideas and analogies, classifications and concepts. We cannot cram the embryonic world of tomorrow into yesterday's conventional cubbyholes. Nor are the orthodox attitudes or moods appropriate. (Toffler 1980: 18)

Toffler's response to change has been to turn upside down many of the ideals held dear to the era of industrialism. To understand the waves of change requires a different perception of what change, with all its conflict and tension, is all about. For Toffler, amidst the multitude of forces pressuring change are two powerful shifts. One is the increasing diversity in society - the "de-massification of society". The second is acceleration which speeds the pace at which historical change occurs. In an industrial society familiarized with low diversity and slow change, individuals and institutions suddenly find themselves in an environment of high diversity and rapid change. The result,

in Toffler's view, is decision overload, confusion, incompetence and lack of vision. For the institution of education, it is essential to redesign, from the bottom up, a framework which can respond to the diversity of its stakeholders in a rapid and directed manner. In order for this to happen requires re-thinking the role of education for an entirely different civilization.

> One can glimpse in it a civilization that makes allowance for individual difference, and embraces (rather than suppresses) racial, regional, religious, and subcultural variety. A civilization built in considerable measure around the home. A civilization that is not frozen in amber but pulsing with innovation, yet which is also capable of providing enclaves of relative stability for those who need or want them. A civilization no longer required to pour its best energies into marketization. A civilization capable of directing great passion into art. A civilization facing unprecedented historical choices - about genetics and evolution, to choose a single example - and inventing new ethical or moral standards to deal with such complex issues. A civilization, finally, that is at least potentially democratic and humane, in better balance with the biosphere and no longer dangerously dependent on exploitative subsidies from the rest of the world. Hard work to achieve, but not impossible. (Toffler 1980: 375)

In economic management policies, re-thinking how Post-Fordist organizational bureaucracies operate has occurred from a variety of perspectives. It is the extent to which organizational restructuring during the 1980s and 1990s is affecting the nature of managerial work which is most important in its needs for changes both in the quality and nature of human skills. In response to economic skill based ideals, Scase (1992) argues that the reason education has failed to meet industry needs is not because of technical competencies but because of the inability to provide talent in inter-personal skills deemed

necessary for managing people in organizational forms that are post-bureaucratic, flexible and highly de-centralized. He argues that despite the popularity of 'entrepreneurship' in corporate relations, institutions in most advanced capitalist economies continue to shape the character of the social structure as well as the economic fabric within which profit-making corporations operate, and as such, continue to promote bureaucratic modes of operation under systems of Fordist management.

Using Post-Fordist management language associated with flexible specialization, the notion of the ideal 'flexible firm' specifies a concrete model for the reorganization of corporate bureaucracies and therein lies its appeal. The formulation suggests it be treated as an 'ideal' situation which emphasizes key elements of employment practices in some organizations. In addition, the model prescribes elements of 'good practice' and, as a result, has gained "a place in the policy language of governments and employers.....in legislation, in management consultancy and in industrial relations bargaining" (Burrow, Gilbert & Pollert 1992: 4).

The 'ideal typical flexible firm' attempts to secure three types of economic flexibility:

> Numerical flexibility: the ability to change the size of the workforce quickly in response to changes in demand. Second, functional flexibility: the ease with which workers can be redeployed to different tasks to meet changes in market demand, technology and company policy; and third: financial and pay flexibility to facilitate numerical, and especially, functional flexibility. (ibid.: 4)

To achieve numerical flexibility, the flexible firm may have a designate category of workers (peripheral) without the security of long term employment; or this group could be composed of short term contract, part-time or job-share employees. Numerical flexibility could also be obtained outside the firm through use of subcontractors, self-employed specialists, home workers or agency temporaries. Functional flexibility is achieved by providing a 'core' group of employees security and high wages in exchange for willingness to adapt to changes in tasks, or in the acquisition and utilization of new skills. Financial and pay flexibility adjustments are placed in alignment with internal functional flexibility and external market rates for equivalent skills.

The ideals of the flexible firm directly implicate current bureaucracies. Within present bureaucratic organizational attitudes of both private and public institutions lies the promotion of risk-avoidance, conformity, and ritualistic behavior (Scase 1992). By embracing Fordist and Taylorist management methods which delineates work tasks and responsibilities, hierarchical bureaucracies were able in the past to sustain reliable, predictable and compliant employees. Thus, the rationale of a cost-effective organization was one in which there was centralized control with hierarchical decision-making, and vertical communication procedures. "The bureaucratic paradigm of organization stressed the need for tasks to be allocated according to strictly defined principles of *superordination* and *subordination*. Hence *obedience* and *compliance* were strongly emphasized as organizational values" (Scase 1992: 80). The implications of these assumptions follows that recruitment procedures fostered the selection of employees who

demonstrated compliance, duty and reliability. Unquestionably throughout the twentieth century, the structuring of organizations according to bureaucratic principles offered relatively stable career paths for the majority of the middle class. By assuming work tasks under clearly delineated procedures and precisely defined job descriptions, they were able to maintain reasonably high earnings and social status.

However, these trends changed direction in the 1970s with consequences that continue today. The middle class optimism and confidence of previous decades became increasingly superseded by the realization that career aspirations for improved living standards cannot always be fulfilled. Scase (1992) identifies three factors which may have attributed to this change of mood. First, the early 1970s experienced a number of industrial disputes between management and organized labour which called into question the ability of management to control economic and political force. With increased wage increases and falling profit margins, corporations became reluctant to expand business operations. Secondly, the global oil crisis in 1973 increased production costs while at the same time weakening the competitive positions of national economies as a whole. Third, with the expansion of business schools and business education, many corporate leaders were encouraged to review the cost-effectiveness of Fordist and bureaucratically based management systems (p. 83). The demands for greater efficiency and cost-effectiveness in both private and public sector organizations to achieve higher levels of measurable performance have resulted in a decrease in job security and predictable career paths.

Post-Fordist changes in national and global markets to economies of scope have led corporations to adopt strategies aimed at production for specialist 'niches' rather than more general mass markets. In response, organizational restructuring has led to the adoption of a post-bureaucratic paradigm which is characterized by the valorization of entrepreneurial and creative forms of conduct within organizational structures that are more loosely defined. Scase's (1992) interpretation of the post-bureaucratic paradigm bears a marked resemblance to the flexible firm model.

> Instead of an emphasis upon clearly defined tasks, work roles are broadly determined according to their contribution to the accomplishment of *specific* objectives. Channels of communication are deliberately encouraged to be 'open', 'flexible', and 'informal' rather than, as in bureaucratic structures, according to strictly prescribed authority roles. If, then, reliability and conformity are valued attributes within bureaucratic management systems, in more loosely structured organizations, a greater emphasis is placed upon individual creativity and capacity to cope with ambiguity and change. Managers are expected to be psychologically immersed in their jobs and it is for this reason that so much importance is attached to fostering appropriate organizational *cultures*, since it is through these, rather than through explicitly stated rules and regulations, that psychological involvement is obtained. (Scase 1992: 85)

It is in this framework of thinking that authors such as Peters and Waterman's book *In Search of Excellence* has gained popularity in both private and public sectors. The authors argue that current high performing organizations are those which have been able to reduce dependence on highly formal structures. In their place is the implementation of "*cultures* which encourage, among other things, 'a basis for action', 'autonomy and entrepreneurship', 'productivity through people', 'hands on, value driven' leadership, and

'simultaneous loose-tight' organizational properties" (cited in Scase 1992: 86). Relatedly, within an 'ideal' model of the flexible firm also lies a collaborative division of tasks, horizontal management and decentralized decision-making, greater reliance on skills and worker involvement, and the philosophy of human craft control over machines as tools. The central component within and between firms is a culture of cooperation, trust, and interdependence (Amin 1994).

The flexible specialization approach envisions a more positive, humanistic organizational model than do the technocentric industrial paradigm of the neo-Schumpeterians or the more pessimistic regulationist approaches which anticipate technology-induced dehumanization and dissolution of work. Flexible specialization "promises to restore dignity and skills in the workplace, as well as to establish new democratic industrial relations based on cooperation, mutual respect, dialogue and 'studied interest' between employers and employees. It could thus prefigure a less contentious 'yeoman (artisan) democracy' that replaces the Fordist model of democracy which was based on mass representation as a general standard for social interaction and political behaviour" (Amin 1994: 21). What still remains in question is the way in which these conflicting paradigms will be played out on a regional and global scale.

Thus, this interpretation of the future is still in question. However, within the organization of work, flexible specialization in the form of the non-bureaucratic paradigm and the flexible firm model has demonstrated influence within contemporary changes occurring in

regions such as the craft-based "Third Italy", the Silicon Valley (technopoles) in the U.S., as well as high performance based companies in Germany, Italy and Scandinavia. "Common to all these examples is said to be an organizational structure drawing on decentralized management, worker participation, polyvalence, skills and active labour-management cooperation" (Amin 1994: 22).

The rejection of the bureaucratic paradigm which values routinized behaviour and general resistance to change in favor of the 'flexible' or 'adaptive' firm where creativity, innovation, and adaptability to change are valued directly implicates the way in which educational bureaucracies currently operate. Within looser flexible/adaptive organizational forms there are fewer explicit guidelines governing behaviour. Consequently, in the absence of such rules and regulations, a greater emphasis is placed on the organizational commitment to create relationships of 'high trust' through use of a variety of inter-personal skills geared towards motivating staff to achieve their goals. Scase (1992) asserts that within this high trust framework "managers *work with* their subordinates" to achieve specified goals rather than the "imposition of orders and instructions through more traditional forms of 'autocratic' management." Hence, it is essential that managers develop "leadership skills that encourage the sharing of problems and the discussion of possible solutions and strategies for achieving goals." This presupposes that managers themselves are flexible, accommodating, and "adopt an open-participative approach to decision-making." It is the ability to empathize and understand the personal job needs and motivation of staff that make the "psychological requirements

of 'competent' management" more "complex and demanding" than those required in traditional bureaucratic structures. "If, within bureaucratic forms, managers could manage through rules and procedures and thereby psychologically distance themselves from their staff, this is no longer the case. The flexible firm, by contrast, demands a higher degree of psychological involvement in generating motivation and morale among staff and, hence, a greater understanding of human relations and inter-personal skills" (Scase 1992: 89).

Achieving genuine employee involvement is a slow and difficult process, but once respect for the dignity and intelligence of employees is infused in the process, there is little possibility of turning back. Shoshanna Zuboff's *In the Age of the Smart Machine* suggests a deeper perception of what is at stake in these changes. As a professor at Harvard's Business School, Zuboff explored the issues involved when implementing advanced technologies into work settings. The primary thrust of her argument is that, as western industrialized countries have gained experience with powerful new computer technologies, individuals are confronted with two very different possibilities of what could happen to both the quality of production and to the quality of the employee's life. Work can be designed to increase centralized control while reducing human involvement to deskilled, programmed functions; or it can be designed to produce radically different results. To illustrate the differences, Zuboff offers two scenarios. As she depicts it, the choices we face involve the conception and distribution of knowledge and power in the workplace.

The first scenario entails computer-mediated work: the "automated" alternative. Within this option, computer technology is designed to perform processes done formerly by human hands, particularly specified to produce more continuity and control. Intelligence is placed in the control of the machine, effectively replacing critical judgments formerly the domain of the work force. Retaining control of the organization's knowledge base, managers use the new technology to maintain hierarchical chains of command. The new technologies might be used to create new forms of surveillance and techniques of remote, automated management to enhance centralized control. This scenario profiles the propagation of continued bureaucratic dominance displayed within the Fordist models of management practices throughout the twentieth century.

The second scenario, the "informated" alternative, presents a very different possibility. Within this option lies new computer technologies which become the source for designing innovative methods of sharing information through communication and reflection. Leaders in the organization recognize the new knowledges and skills required by the work force to tap the potential of intelligent technologies; technology which produces a more abstract kind of work that hinges on understanding and manipulating information. Within this new work environment, innovative methods of information sharing and social exchange are fostered and enhanced. Work relationships become collaborative and connected through complex, changing relationships. As novel arrangements of work tasks emerge from the data-rich environment, jobs are colored with more challenge and meaning. Hierarchical features begin to blur as new technologies integrate information

across time and space. Managers and employees form new roles that allow creative responses as well as opportunities to add value to products and services. "These methods in turn reproduce a deepened sense of responsibility and joint ownership, as access to ever broader domains of information lends new objectivity to data and preempts the dictates of hierarchical authority" (Zuboff 1988: 7).

Currently in education, Post-Fordist entrepreneurial management practices are evidenced in the financial and administrative realms of 'site-based management' where school administrators have been given more responsibility and authority over some functions, such as staffing and internal budgeting. In addition, accountability at the school level has increased - from the students they attract (clients/consumers), to parents and the general public (the market), and to central authorities (who determine specific 'targets' or goals to be met). The increased emphasis of employment of teachers and administrators tied to "performance-based contracts" (Correlje 1994), the "down-sizing" of school staff and budgets, the initiation of de-regulation for teacher qualifications, class size, teaching hours, private sponsorship of public schools, and public sponsorship of private and charter schools characterize the move towards Post-Fordism and post-bureaucratic discourse.

With respect to staffing, the post-bureaucratic paradigm associated with flexible specialization in the form of the 'flexible firm' suggests that the work, responsibilities, and authority becomes a shared, interdependent, and high trust network of relations. In the Post-Fordist flexible firm model, the functional flexibility of the 'core' group of employees

centres around the provision of tightly focused directives and performance criteria for the school. This concentration of decision-making power at the centre is not intended to provide the continuation of hierarchical arrangements. Rather, the intent is to support shared authority, autonomy, and interdependence within an interconnected framework of clearly specified goals. The flexibility and adaptive abilities of each core worker within this framework becomes crucial to the functioning of the 'whole' whether it be within an individual school, business, or region. Hence, primacy is granted to employees who exercise creative leadership and strong inter-personal skills required by a more 'adaptive' organization (Scase 1992: 90). At a school level, the core group might consist of the school 'manager', curriculum experts, and a core group of professionally trained and experienced teachers. The possibilities of a 'periphery' workforce within the school might consist of a larger number of assistant teachers, teacher aids, technical support staff and spontaneous guest appearances which could be drawn from a variety of backgrounds; all of whom could be employed through short term or part-time contracts. The possibility of such an arrangement assumes that, as such, schools would remain within their current geographical environment. An alternative possibility might envision the 'school' as transitory in nature, where staff and students operate within a variety of settings both physically, and with use of advanced technologies, mentally as well.

In education, as in other private and public sectors, Scase (1992) views "the direction of organizational change - from bureaucratic to the adaptive - is leading to a greater degree of 'fit' between the *supply* of educated labour by the university system and the demand for

such labour by large-scale organizations; a trend that is being reinforced by developments with *both* the university system *and* large scale corporations" (p. 90). By recognizing the need for creative leadership and inter-personal skills, Scase views the future correlation between corporate needs and higher education in a positive light.

> The abandonment of bureaucracy and the adoption of more 'flexible' structures are making managerial careers more attractive to university graduates because they are no longer compelled to conform to the same extent as in the past, to rules and procedures in a tightly prescribed manner. They are less likely to be constrained by hierarchical authority relationships and to be exposed to organizational cultures which emphasize role compliance, conformity, and the underplay of personal creativity. Instead, the 'flexible' organization, in the importance that it attributes to informal personal relationships, openness in patterns of consultation and communication, and the underplay of 'rank' and status orders, emphasizes attributes not unfamiliar to those which graduates experience within their various university settings. (p. 91)

Scase goes on to provide examples of organizations which attempt to foster 'flexible' settings; for instance, high technology companies such as electronics and pharmaceuticals, as well as in areas such as advertising, broadcasting, publishing, and the popular media. Recognizing and drawing on the creative, innovative talents of each individual in the organization reinforces the personal worth and value of each person's ideas. Adaptive and innovative environments imply a willingness to take risks, to be able to think critically, to foster new ideas, and to imagine new solutions. Compared to bureaucratic organizations, it initiates a new way of *thinking* as well as *being* in labour relations.

For systems of education, training, and employment this form of post-bureaucratic organization is dependent on the decisions made by employers, politicians, trade union representatives, among others, in both the private and public sectors. It involves a different way of thinking about how to organize and conduct the process of learning for students in schools. In Zuboff's (1988) argument, it is the choice to 'automate' or 'informate'. It is the latter which combines innovative technology with a well-educated work force capable of learning that the future long term welfare of nations depends on. These developments have caused corporate leaders to consider what learning styles are required for new systems of organization. The argument that a viable work force is dependent on employees who have strong numerical and literacy skills, is augmented by the requirement that workers have the ability to learn, to think in abstract and contextual terms, and to collaborate in solving problems. It is possible for the bureaucratic institution of public education to adapt to a form which values autonomy and fosters high-trust relations within its localized groups or communities. Without a sense of reason and purpose within a high-trust environment, learners will remain compliant. They must be allowed freedom to explore and engage in critical thought. If nothing else, empowerment of individuals has granted them choice and within choice are contained the ethical concerns of the larger society.

The Argument for Post-Bureaucratic Educational Organization

Brown and Lauder (1992) argue that the present bureaucratic nature of schooling in its reinforcement of 'low-trust' organizational relations has reinforced 'low-ability' education

systems and training "in terms of the collective pool of skills, knowledge, and know-how which an organization of society is able to deploy" (p. 7). By referring to the practices of low-trust societies to gear educational practices to the top twenty percent of the school population, Brown and Lauder argue that educational excellence defined in this manner has ignored the vast majority of talent left untapped in the remaining eighty percent. In the present era of transition, they refute the continuation of 'meritocratic criteria for recruitment' based on students' abilities to regurgitate information deemed worthy in written examinations. The argument centred on low-trust, low-ability societies calls into question the manner in which intelligence and educational excellence are defined.

> Instead of assuming that there are severe limits on the pool of talent, societies will need to recognize the wealth of talent which exists throughout the whole population irrespective of class, gender, or race, and concentrate on harnessing this wealth of talent to empower the population for active citizenship as well as for their future occupational roles. This view is based on the belief that it is often 'social hierarchy and the world views associated with it that restrict the unfolding of human capacity and not the limitations of natural endowment' (Sabel 1984: 224) ... the development of 'collective intelligence' will be central to the establishment of sustainable economic growth. (p. 8)

Hence, Brown and Lauder's way of thinking about how the education system could be organized reinforces the notions of the adaptive firm. Regardless of whether an individual is an executive, manager, researcher, teacher, childcare worker or shopfloor worker, the ability of an organization to maintain productive capacity depends on its ability to access the efforts and insights of all employees. In an atmosphere of focused attempts to maintain economic growth coupled with rapid technological advancements, it is becoming

increasingly necessary to tap the potential of all minds regardless of status or position in society.

In summary, the choices Scase, Zuboff, Brown and Lauder offer involve not only the choices faced by leaders in industry and labour. By making these choices in a world of intense competition and high technology, they will also decide on the quality of life and learning experienced by citizens in their daily work and leisure. The responses to analysis on the style and content of learning environments implicate schools to move towards organizational design which fosters a culture of collaboration and lifelong learning. To focus on single-minded ideals such as test scores which foster competition, individual action, beliefs that knowledge is static and should be memorized and recited directly contradicts democratic learning environments. In Toffler's view, we must be willing to re-shape both ourselves and our institutions to deal with the new realities in order to offer a more workable, humane future. A democratic environment depends on cooperation, group action, and a belief that knowledge is fluid.

Chapter 6

HOW SHOULD AN INDIVIDUAL RESPOND: A PERSONAL VIEW

It is the abyss between shifting paradigms in which the education system and my work as an educator have come to be that causes me to question my personal beliefs about teaching and learning. On the one hand are forces driven by economics which seek to maintain progress and prosperity - a place where profits drive the bottom line: the shift from Fordism to Post-Fordism. On the other is the essence of humanity which consumes us all; our aspirations, passions, our needs for security, belonging, and self worth. It is rooted in the culture of who we are and how we see ourselves fitting into the broader community: the transition of ideals rooted in Modernism to the diversity of perspectives offered in Post-Modernism. As educators, we are caught in a bureaucratic drift between diverse perspectives which contain multiple ideologies struggling for domination. For me, it is the process of discovering how the means justify the ends. Underlying all is a foundation formed from my own beliefs and assumptions. My belief to foster individuals who can think critically in order to make rational choices about their future involves the orchestration of a different way of thinking about how the teaching and learning process evolves within the classroom; a process which, I feel, can bridge economic ideals with human ideals.

To sort out a balance between the economic ideals focused on performance outcomes and the critical awareness necessary to create self-regulated, informed thinkers requires

integration of interdisciplinary skills, knowledges, behaviours and attitudes within a context which bridges the learners' diverse range of experiences. The focus on skills and knowledge required to display competence in performance must be considered in relation to incorporation of personal growth and well being in an environment which validates critical thinking. Simply said; not easily done.

In my view, for a society which increasingly demands "individual creativity and capacity to cope with ambiguity and change" (Scase 1992) requires an individual who has high self esteem and a feeling of self worth. The greater the number of choices and decisions to be made in the present day workplace, the more urgent the need for a disposition of competence to be able to cope with the challenges of life while at the same time feeling worthy of happiness. With rapid change and uncertainty in organizations and the desire for workers to be creative, flexible and take risks, as well as manage change and take charge of their careers, requires a person who can think for themselves. Since job security no longer exists, security must come from within. Therefore, it is crucial that schools continue to foster goals related to personal growth and well being.

Learning is a complex, interrelated series of processes which involves the relationship of the learner to both his/her environment as well as the focus curriculum content. In reflection, my thoughts evolve around the many things that I consider when understanding what effective teaching and learning is all about. Through the process, I have formed a number of assumptions which drive the way I interact in the learning process with my

students. What stands out is the way in which my personal experiences and reflections have been integrated with three general areas of study; cognitive theories involving Multiple Intelligences (Gardner 1983), Constructivism (Brooks and Brooks 1993), and Frameworks for Instructional Design (Marzano 1993). The connection between Multiple Intelligence Theory, Constructivism, and Dimensions of Learning hinges on the meaning-making of the individual learner. It is my belief in the importance of having a sound personal reason and purpose for engaging in learning which motivates the mechanisms of skill and knowledge acquisition and refinement. I feel that without a reason for learning, with explicit purposes attached, student involvement in higher levels of thinking will not occur. Consequently the current pressure of economically driven outcomes will continue to fragment learning unless educators can bridge higher level thinking skills in an environment where all students are actively engaged and able to think. Furthermore, I believe it is through the nurturing of positive attitudes and perceptions about learning combined with the development of mental habits such as self-regulated, critical and creative thinking that a connection is made to an individual's ability to acquire, extend, refine and use knowledge in meaningful ways. Without a sense of self in the context of group dynamics and an awareness of one's own thinking, meaningful use of skills and knowledge becomes ineffective and disjointed.

Some clarification is required to understand what is meant by self-regulated, critical, and creative thinking and learning. Marzano (1993) characterizes self-regulated thinking and learning as an awareness of one's own thinking, developing a plan, being aware of

managing necessary resources, sensitivity to feedback, and the ability to evaluate the effectiveness of one's own actions. Critical thinking and learning involves being accurate and seeking accuracy, clarity, open-mindedness, the restraint of impulsivity, taking positive action when warranted, and being sensitive to other's feelings and knowledge base. Creative thinking and learning is characterized by intense engagement even when no solutions are apparent, pushing the limits of knowledge and abilities, to generate, trust and maintain standards of evaluation and to present new ways of viewing a situation. By introducing and reinforcing positive mental habits through stories and literature as well as the student's own works, the values of a variety of cultures are integrated into the daily life within the classroom.

In the elementary classroom, it becomes much easier to overcome the bureaucratic model which surrounds educators in education. Because I teach all subject areas with the exception of Physical Education and French, orchestration of skills and knowledge required to display competence are continuously interspersed with consideration of personal growth and well being. For me, the balance is orchestrated through a series of events which seek to connect individual experiences and knowledge into a broader framework of concepts and generalizations. The avenues through which individual students choose to connect their understanding is open and dependent only on their own imagination of ideas and possibilities within a project. By differentiating tasks with individual students, they are able to integrate their own learning styles when demonstrating their understanding. That is not to say that the so-called "basic skills" are sacrificed for a

broader range of laisse faire ideals. It is more a re-designing and re-thinking of what is to be a program uniquely designed for individual diversity; one that redefines what is regarded as basic and functional literacy.

For me teaching and learning is a living process, not one steeped in bureaucracy, so it is that literacy for myself and my students becomes defined as the ability of a person to function outside the school walls; to have the capacity to be an thoughtful, informed citizen; as a competent, confident, knowledgeable individual in whatever occupation or life event he/she comes in contact with; and, finally, an effective, contributing member of a family. Through the use of reading, writing, mathematics, scientific and social skills in real life situations, it is the intent of the classroom program to foster the skills, knowledge and behaviours needed by students in order to be productive members of society. In the classroom, it is the integration of activities and the result of discussions which seek to identify the students' perceptions of what self-regulated, critical and creative thinking involve, what characterizes good citizenship, what the qualities of a hard worker are, how they envision family relationships to be and what forms of critical inquiry are meaningful and motivate them to seek knowledge and understanding in all areas of study. This involves first, the ability to access information by asking probing questions; secondly, to acquire, synthesize and evaluate information for accuracy, relevancy, and quality; third, to apply understanding of information to a task or problem which involves sophisticated thinking and reasoning skills; and fourth, to communicate information clearly and succinctly. Explicit modeling of strategies related to thinking and learning occur in all

dimensions, from fostering positive attitudes, perceptions and mental habits about learning and thinking to acquisition, extension, and refinement of knowledge in a meaningful context.

First, to know how to ask questions means a direct reversal of the way 'teacher as lecturer' has functioned in the past. Instead of being rooted in giving the right answer, students are granted a larger percentage of school time to ask and discuss questions within their own framework of inquiry. Five types of questions form the basis for dialogue: for clarification, e.g. What do you mean?; to probe assumptions, e.g. What are you assuming?; for reasons and evidence, e.g. How do you know?; to examine views on perspective, e.g. What might someone say who believed that?; or for implications and consequences, e.g. Because ..., what might happen? For example, in the examination of other cultures on a regional and global level, discussion begins with the exploration of the idea of culture on a personal level. The focus question in this inquiry is "If you were to choose an artifact that represented your (self, family, etc.), what would it be and why? The sharing of artifacts representing family, self, work, friends, leisure, and heritage selected by individual students involves journaling their reasons for choosing each artifact. When presented to a peer, the reasons for choosing the artifact are not revealed until the partner has written his impressions of the artifacts and what they tell about that classmate. Questioning of what others perceived to be the reason for choosing the artifacts when compared to the person's personal story signifies the importance of understanding the attached beliefs that the artifact symbolizes. To understand one's own belief system and

why it is a part of who they are evolves into a focus on validations and respect for commonalties in belief systems as well as encouragement of differences. In this way, the students begin to understand the diversity within the class culture of which they are a member. Consequently, they can explore other cultures with a deeper level of awareness and understanding about what determines a culture and how a culture evolves. Because the students have experienced the difficult process of investigating their own cultural belief systems and values, they are more likely to develop an empathetic awareness of the complexity of other cultures as well as becoming cognizant of how their beliefs distort perceptions of other cultures. Awareness can reduce distortions, allowing students the chance to view a culture's qualities from its point of view rather than their own. It is from the richness embedded in the validation of an individual's own personal experiences that acceptance, belonging, security and understanding evolve within the classroom. Questioning from this point of view elicits the seeking of understanding versus questioning for interrogation.

Second, within the framework of inquiry is the ability to acquire, synthesize, and evaluate information for accuracy, relevancy, and quality. With the overwhelming number of resources available on a multitude of databases and the internet, it has become more important than ever to be able to critically evaluate information accessed. For example, when beginning studies of astronomy, information retrieved from multiple sources directs the learner to question the significance, validity, and reliability of new information acquired through constant comparison and contrast of how it relates to existing

information. In astronomy, as in any area of inquiry, new information is constantly being discovered about the motions and characteristics of stars, moons, and planets which, in turn, continually shifts our perceptions and knowledge of how our universe works. Again, the inquiry into how our universe works, causes students to question the reason for their own existence and elicits questions of how humans have influenced or have been influenced by the forces of nature around them at any point in history.

Third, extending beyond the ability to evaluate information involves the ability to apply information to a task or problem which implies increasingly sophisticated thinking and reasoning skills; skills which currently are not reflected in the large number of achievement tests. For example, to augment the manipulation of information gained in the study of planets, stars and galaxies, a project which synthesizes the student's understanding could be contained within a multimedia presentation such as Hyperstudio which incorporates not only the information gained from inquiry, but also the design features encompassed within the use of multimedia as a presentation tool. The ability to create a project within a multimedia context requires the utilization of strategies which require higher order cognitive processing, critical thinking, and cooperative problem solving due to the complexity with which the students orchestrate and plan from a programmer's perspective as well as consideration of the user's learning needs. The overall planning of flow charts and navigation tools interspersed with decisions regarding screen design, use of graphics, sound, and video throughout the program not only allows for personal learning preferences and modalities; it fosters real time abilities of students to depend on each

other's strengths and insights when confronted with problems related to the technical or production aspects of the program.

Fourth, the ability to communicate information clearly and succinctly is assessed through the eyes of the students, their peers, parents and teachers. Assessment criterion and rubrics are collaboratively agreed on prior to beginning the project so that evaluation of identified skills, knowledge and behaviours is accomplished in a constructive, non-threatening manner. Decisions and choices in how information is presented fosters critical analysis and feedback from peers when evaluating each others' projects. Again, questions aimed at clarification and understanding are central to the learning process and are formulated in the context of "What were you thinking when you ...?", "Why did you choose to present your information ...?", and "What did you find most significant about what you learned about ...?" It is the constant interplay between the affective and cognitive realms which manifest the interdependence and complexity in which learning takes place.

The manner in which students approach, interact and persevere with learning tasks is directly related to how they perceive they can influence their own learning in their own unique way. It is the freedom to express what is learned in novel and unique ways that is invigorating, self-motivating and constructive. As in Scase's (1992) discussion of post-bureaucratic organizations, at the heart of a classroom culture is a teacher who is psychologically immersed in the learning environment; one who trusts, accepts and

validates the efforts of all learners. To support Brown and Lauder's (1992) argument, the expectations for success include the talents of all students, not just the top twenty percent who are determined to have achieved educational excellence on achievement exams. It is the recognition of differentiation, the diversity of learner experiences and learning styles that drives the formation of self-regulated, creative and critical thinking within the classroom.

I feel that I can make a difference in my students' lives that goes beyond the competencies required of achievement oriented accountability measures. Without the human, affective recognition for unique ways of thinking in a caring and accepting environment, what does it matter? Economic prosperity does not progress in a vacuum devoid of the human characteristics and imagination that cause it to be. It is the metaphysical well being within humanity which fosters the ability to generate new ideas and possibilities within all aspects of life; be it in work, leisure, family relations or otherwise. As educators we can balance the pressures for accountability and academic performance with civic responsibility, positive self worth, constructive interpersonal skills and active communication. Without a sense of direction that involves a strong belief and knowledge about what teaching and learning is all about, one that validates critical thinking and personal well being, academic success based on the achievement of merit will continue to offer an inadequate solution to a future of post-industrial events.

Regarding the bureaucratic climate within the school environment, my experiences have included the unwieldy bureaucratic and political structure which causes frustration, low morale, lack of creativity and innovation when dealing with the diversity of issues we, as educators, face on a daily basis. I have also been fortunate to have experienced the energy and self-directed learning that accompanies the non-bureaucratic side of management within a school environment. There was a time at the beginning of my career where I was lucky enough to work with a team of five teachers who understood the need to break down the barriers of the political process in order to value and acknowledge the human issues at the surface of what we do in our daily relationships with students. As such, there was no bureaucracy with which we needed to be concerned with. All decisions regarding our yearly budget and organizational-management concerns were dealt with by the team. My feelings of admiration and respect extend to each of the team members I was fortunate to work with. What may be at the heart of why we worked so well together is that we were there for the same reason. Whatever obstacles there were to overcome, it was the students in our classrooms who dictated our reasons for being there, and whose responses motivated us to seek deeper meanings in ourselves and our students. Teaching and learning was a living process through which we viewed our relationships. As the five of us sat around the table to collaborate on the direction of our efforts, we dealt with each other on an interpersonal level of mutual respect and acceptance. Communication was never based on personal attack; rather, it was intended to seek understanding, to elicit new ideas and possibilities within the framework of discussion.

As a teacher working within a bureaucracy currently being re-designed, my role within this broader framework is yet to be re-defined. Whether or not a systemic environment based on high trust relations becomes a reality is yet to be one experienced.

It needs to be stated that there is nothing new in all of this. Rather, it is a re-thinking of how education can begin to adapt and change to meet the changing needs of society. The child-centred education movements of the 1970s sought to achieve a balance between the academic performance of learners with the individual's sense of well being. Zuboff's discussion of the 'automating' function within a de-humanized bureaucracy versus the 'informating' function within a democratic, participatory and humanistic non-bureaucratic organization is very much the picture of what choices we have to face within a classroom, a school and a school system. It is extremely difficult to move away from the critical, low-trust, hierarchical bureaucracy of the past century. As educational institutions seek to implement non-bureaucratic mechanisms of organizational redesign, the involvement of teachers and students to offer creative alternatives requires equal attention and time investment. As has been experienced in the past, without the acknowledgment of 'shop floor' ideas and concerns, in this case, the active involvement of teachers and students, carried out in an atmosphere of mutual trust, respect, and integrity, educational innovation and change will not occur.

It is the components of a democratic classroom which seek to enrich and exemplify the conscious reinforcement of communication, conceptualization and coping strategies that

need to be carried over into the daily workings of the school and the school system. It is a place where academic skills (the ability to communicate, think, and learn) are valued equally with personal management skills (positive attitudes and behaviours, responsibility and adaptability), and teamwork skills (to work with others). Consequently, the control and power previously held by the teacher is redistributed to the learners in an interdependent, ecosocial network of relations; relations which are in a constant state of flux and change.

For such an environment to exist in each and every situation throughout a learner's range of experiences, involves coordinated effort and communication at all levels of the redesign process; a process which validates trust, respect, and integrity. On a personal level, I view the greatest adversary to providing a smooth interface between education and its changing role in society, is *time*. The ability of bureaucratic institutions such as education to shift toward a more democratic 'socio-technical', 'non-bureaucratic', 'informated' organization relies on a shift in consciousness of the larger society in which we as citizens live. By continuing dialogue which cuts through low trust power and control issues to determine how education's mission and purposes are played out, the possibilities associated with new models of organizational design may become a reality.

Chapter 7

CONCLUSION

In this thesis, I addressed the following questions: first, "What is the nature of change that encompasses education in the 1990s?"; second, "What is the effect of change on schools?"; and third, "How can an individual respond to these changes in education?"

In reference to the first question, "What is the nature of change that encompasses education in the 1990s?", I argued that the nature of change for schools has evolved from a shift in economic and social policy; from the social consensus attached to Fordist-Keynesian economic policy to Post-Fordist ideals, principles, and policies. Within an increasingly globally competitive postindustrial and postmodern world which has been characterized by acceleration of change, intense compression of time and space, cultural diversity, technological complexity, national insecurity and scientific uncertainty, the educational institution is caught between the rigid hierarchical bureaucracy of the past and an organizational redesign which might bring it into closer alignment with current changes in society. Education has been under intense pressure to ensure an adequately trained workforce, while at the same time seeking to maintain the ideals of citizenship and personal growth. For the future of education, it was argued that we must have a humanistic education system which fosters critical thinking within the context of an economic system which holds its institutions accountable for outcomes.

In reference to the second question, "What is the effect on schools?", I argued the effect on schools attempting to respond to increasingly complex demands and expectations has led them to the point where they are unable to satisfy all demands. This in turn, has led to a period of chaos and confusion; a bureaucracy unable to attend to accelerated change in an increasingly diverse society. The pressures to compromise educational aspirations for learners involved in critical thought with economic ideals for competence in performance and outcomes have left schools with little energy to maintain their human, caring side.

In reference to the third question, "How can an individual respond to these changes in education?" required two parts: a theoretical view and a personal view. For an industrial civilization in transition to the emergence of an entirely new era, requires re-thinking not only the way in which the role of education is defined, but also on a personal level, how we as individuals define ourselves; in work, in our families, and at play. By making these choices in a world of intense competition and high technology, we will also decide on the quality of life and learning experienced by ordinary citizens in the events of their daily lives. Therefore, it is crucial that we, as educators, maintain the human side of what we do in schools; to continue to foster critical and complex thinking in an environment that recognizes individual strength and uniqueness.

Therefore, my claim is that despite the overwhelming nature of economic theory, critical thinking must prevail in order for us to continue to live in a democratic society. There is

nothing new in all of this - it is simply re-shifting the balance between economic ideals and human aspirations for security, belonging, and self worth.

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IMAGE EVALUATION
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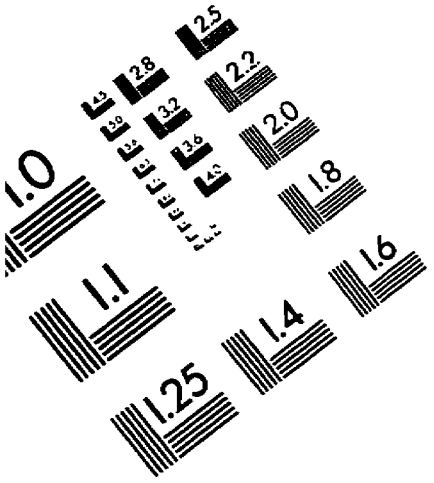

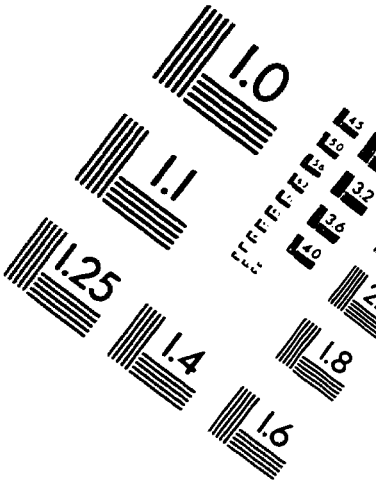

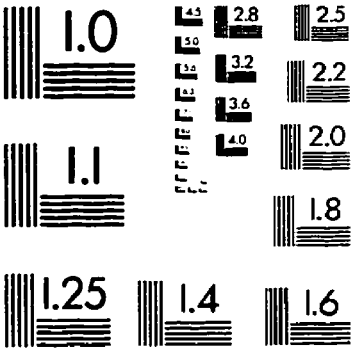

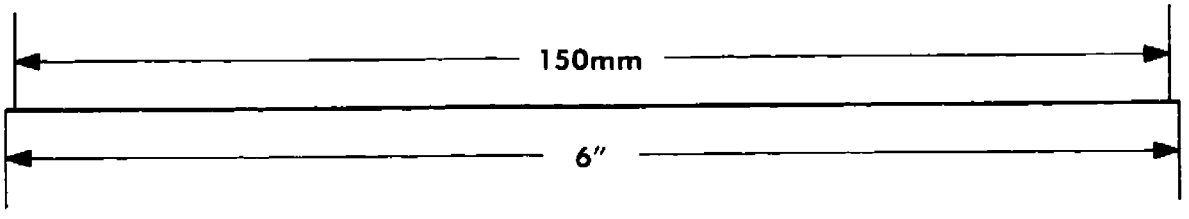

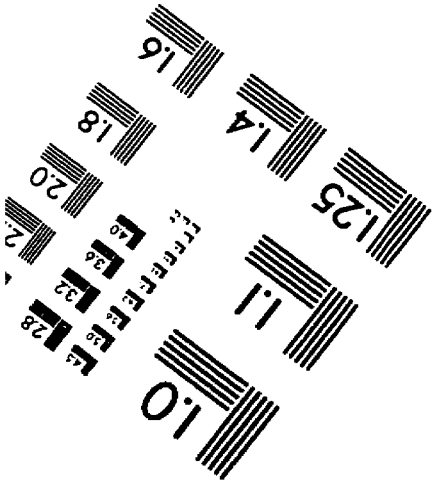

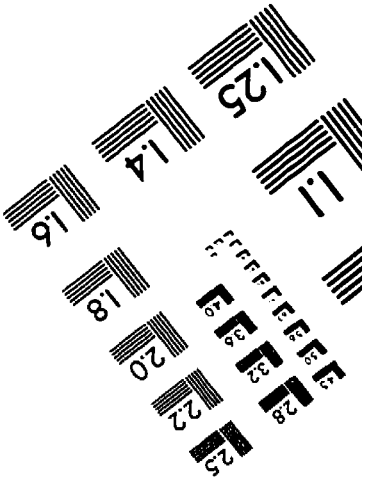

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