Systems In Tension: Perceptions of Business and Education in Partnership

by

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ABSTRACT

The aim of this research project has been to map the range of perceptions that a small sample of educators, business representatives and students, drawn from communities situated around an urban center in western Canada, have of the nature of business and education as well as business-education partnerships. Through an analysis of these perceptions, this work is intended to develop a framework for for the study of these partnerships in the future, and in the development or avoidance of such partnerships by the potential participants in them. From the range of perceptions held by the participants in this dissertation, we can conclude that partnering is not a simple matter of two parties agreeing to some workable union between them for mutual benefits. Yet, despite many benefits accrued, partnerships are troublesome arrangements. Business and education systems are comprised of factors, including participants' perceptions of the purposes, form and structure of education, that influence both the approach to, and the set up of, partnership arrangements.

The difficulty of business-education partnerships is far more complex than questionable business motives and practices. From the perceptions of the participants in this study it is evident that education alone in partnerships is a matter interpreted differently by its various stakeholders and practitioners. I am not suggesting that these perceptions are generalizeable to a larger population, but the perceptions of this group present what I would argue are effective examples of how there can be points of divergence and convergence among the participants in business-education partnerships, and how the fundamental and significant nature of those points can provide the basis of a breakdown or the development of such

partnerships. A greater understanding of these points of view and the factors highlighted by the participants arguably provide the best starting place for dialogue between business and education about partnering benefits, drawbacks and possibilities.

And finally I suggest that systemic thinking principles be used to coordinate these viewpoints and make for collaboration, and not merely sufferance.

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IN MEMORIUM

During the course of this project our family laid to rest the remains of our little son, Aaron James, March 30, 1999. He passed on due to complications arising from Trisome 18, a genetic condition that is fatal. He lived for the duration of his gestation and we saw his movements, turning over, a hand or foot passing by, or bracing against Carrie's abdomen. We prayed, we hoped, we cried. Oh, but what a faith that time challenged and strengthened in us. If, as the apostle Paul said in his letter to those Corinthians, there is no resurrection, then we are without hope and, worse, we are to be pitied above all people because we actually believe there is. Then how stupid this page is and how trite our fleeting experience on this planet! Having felt the hand of God and known His presence, we believe. We will see you, son, one day, one day.

Dr. Anne Hawes passed on shortly after completing her PhD in the Centre.

Although our discussions were brief, I was left with the image of her smile and struck by her quest to know. She is not forgotten.

These deaths remind me that life is very temporal but not for nothing. I am far more grateful for each day and for the family and friends around me.

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Partnership

We must not forget that businesses and schools have very different organizational cultures. They function differently. Their people speak different languages. Business/education partnerships may, therefore, be difficult; but they are absolutely crucial. (Woodside, 1989, p. 25)

Introduction

Business-education partnerships exist ideally for the enhancement of student learning, according to the definition of business-education partnerships by the Conference Board (1995, 1997; M. R. Bloom, 1997), which I discuss in more detail in Chapter Two. When business and education consider partnering together, what do they comprehend about each other and what do they need to know in order to proceed with or halt partnership arrangements, especially in light of Woodside's (1989) comment above?

The purpose of this study is to examine how a small sample of educators, business representatives and students, drawn from communities situated around an urban center in western Canada, perceive the nature of business and education as well as business-education partnerships. Through an analysis of these perceptions, this work is intended to develop a framework for approaching partnerships that will assist other businesses and educators who are contemplating partnering together whether to achieve a more productive association or to understand the limits of partnering together. In an effort to develop this partnering framework, I developed

¹ Education partnerships also exist between schools and higher education, and between higher education and business. For this study, however, I am interested strictly in those partnerships that

an interview schedule/questionnaire (see Appendix 1) to draw out the participants' perceptions of business and education. To focus the interviews with the participants, I developed a table of eleven functional workplace characteristics (see Appendix 4 for further explication), which were a compilation of key characteristics that emerged from my reading in the literature and from dialogues with businesspersons and educators. The eleven workplace characteristics that participants were asked to comment on, and which are found in the next section, are project planning, service, project management, creativity, assessment and evaluation, technology, independence, collaboration, production and communication. I interviewed forty-seven people in British Columbia, Canada, who were either involved directly with, or who were familiar with, business-education partnerships—a sample group comprised of educators, business representatives, and students. This cross-section of people provided considerable insight into how business-education partnerships are

There are tensions between business and education regarding partnering together. In light of the body of literature reviewed for this study, I believe there are ample grounds for conducting an analysis of the participants' perceptions of partnerships. This analysis, which includes the participants' perceptions of business, education and business-education partnerships, will increase our knowledge of business-education partnerships in general. An analysis of these perceptions provides us with views on some of the systemic factors of partnerships. By systemic factors I

involve business and schools.

mean the interacting and relating characteristics that comprise any system.² Betts' (1992) succinct definition of a system is "a set of elements that function as a whole to achieve a common purpose." He defines an element as "a necessary but not selfsufficient component of a system" (p. 38; see footnote 2). Flood (1999) provides an extension to Senge's work in relation to other prominent writers in the field of systemic thinking (see von Bertalanffy, 1981). In essence systemic thinking attempts to be a holistic approach to analyzing systems and their complexity, recognizing that there is interconnectedness to all things.³ A system is any whole entity (Betts, 1992; Flood, 1999). For example, a corporation is a system and this dissertation is a system. This dissertation exists in the context of larger systems of interrelated and diverse departments of the university, and includes the university itself. These are all connected and find further connections in the regional cultures and larger academic cultures around the world, and so on. Business-education partnerships are systems that have connectedness obviously with business and education systems and also with a host of other systems. Each system is comprised of factors and elements, or parts, and while the temptation is to examine the parts in relation to the whole,

² Further below I explain how I incorporated systemic thinking in this dissertation, and how and why systemic thinking is important in this study. "Systemic" refers to a system and is used throughout this dissertation to qualify a term in relation to its particular system. A "systemic problem," then, is a problem that affects the whole of a system.

³ Flood's work focuses on the application of systemic thinking to organizations. Systemic thinking has broader applications, though, that make it ideal for studying business-education partnerships, for example, which really are highly complex "organizations" comprised of the systems of business and education.

⁴ A factor that also plays into the complexity of culture and the systems of business and education is— at this point in time—the influence of postmodernism. Although the full effects—and this is not the place to delve deeply into them—of postmodern thinking have not been examined in business or education, it is already evident that there is no consensus either about its utility or its validity (see Eagleton, 1996; Norris, 1993; Rosenau, 1992; B. Turner, 1994). For a further consideration of the topic of culture see Appendix 6.

systemic thinking eschews such a reductionistic approach on the grounds that it perhaps only provides greater understanding of the parts and fails to consider the unity of the whole system along with the relation to other systems. By contrast, systemic thinking never loses sight of the interconnectedness of the whole system, which therefore provides a richer and more unified perspective of the system.

The interviews I conducted reveal significant divergent and convergent opinions and perceptions of business and education, and of business-education partnerships. While the convergence of opinions between the systems of education and business obviously provides a useful foundation on which to explore partnering, the divergences represent possible conflicting divisions between these two systems that could serve to restrict partnership initiatives or success, especially as business and education potentially seek more partnership arrangements together in the future because of decreased funding for public education. When business and education broach the subject of partnering together, understanding each other's perceptions of partnerships will be vital to ensuring a proper approach to partnering.

Problems in Business-Education Partnerships

The existence of systemic problems in business-education partnerships first became clear to me in my earlier evaluation of the Information Technology

Management (ITM) program (Després, 1996a).⁵ I also found in my review of the

FITM was implemented by Knowledge Architecture, Inc. in British Columbia schools. Knowledge Architecture assembled a team of teachers and industry persons whose mandate was to draft the ITM curriculum, which was marketed to education as a curriculum service venture. The ITM Curriculum Guide focuses on five "Organizing Principles" that, "combine a mixture of both technical and social skills...[reflecting] current demands of the workplace:" Project management skills; Planning, design, and implementation methodologies; Technical operations and support service skills; Business communications and presentation skills; An awareness of the workplace and societal issues of information technology. (Forssman and Willinsky, n. d., p. 3ff). The Guide states that ITM is "designed"

literature, which I discuss further in Chapter Two, that business-education partnership problems are a common occurrence. It occurred to me that three themes seem to underpin or give rise to business and education partnering: namely, the pursuit of educational reform, the desire, on the part of educators, for additional educational funding, and increased profits for business.

If business seeks educational reform in order to satisfy better its workforce needs, this does not necessarily mean preparing students to be workers in specific positions. Broader, more generic skill sets relevant to the workplace are expected by business and would be suitable enough if developed through education. These goals might not be all that removed from the goals of educators who favor providing a broad learning experience. So, it may be that there are yet to be articulated grounds for partnerships that could provide a means for education to acquire additional resources in an era of education funding cuts and in ways that children and education are not compromised in any way by business' involvement.

This study, then, maps out a range of beliefs about and perceptions of business-education partnerships in relation to one sample group's reflections on business, education and partnerships. By analyzing the participants' perceptions of business-education partnerships, I have been able to establish points on which the participants largely agree, as well as points of disagreement, suggesting that the discussion of partnerships would be better addressed and have more positive results through greater understanding of the perspectives and perceptions brought to the table by both parties. One way of making sense of, or imposing order on, the data is

to provide students with skills and problem-solving experiences that are demanded by technological environments in both industry and post-secondary education" (p. 1).

to employ a systemic thinking approach (explained further below). Then business and education could examine partnering together more knowledgeably and with a better understanding of the benefits and drawbacks of partnerships.

Thesis

My thesis is that within a sample of people from business and education, including educators and students, there are representative and significant points of divergence and convergence in the perceptions of business, education and business-education partnerships. The divergences make clear how fragile a partnership between education and business can be, how ripe for misunderstanding and breakdown, unless divergent perspectives are addressed by the participants in the potential partnership. The convergences in beliefs between business and education, on the other hand, represent a potential, overlooked resource for strengthening partnerships through recognition of common values. This has led me to believe that a greater understanding of these divergent and convergent points by participants could provide the best starting place for dialogue between business and education about partnering benefits, drawbacks and possibilities.

Defining Education Partnerships

The Conference Board of Canada (M. R. Bloom, 1997) defines business-education partnerships as "mutually beneficial relationships between employers and educators that are designed to enhance learning for students and other learners...Most business-education partnerships are co-operative relationships in which partners share values, objectives, human, material or financial resources, roles and responsibilities in order to achieve desired learning outcomes" (p. 110). This thesis is about the degree to which the business and education participants in one

community do "share values [and] objectives." Such sharing cannot be simply assumed, for where there are differences, suspicions grow over intent and interests, and cooperation and relationships are undermined. Everyone will agree that to "enhance learning for students and others" is a good thing, but substantial differences in opinion over what that learning is about, in relation to what is to be learned about business and education, will clearly undermine any partnership attempts.

Boyles (1998), in his critical work on business interests in education partnering, provides the reader with enough examples to be skeptical about business-education partnerships as anything other than acts of crass commercialism. Inasmuch as learning enhancement for students may be an ideal in businesseducation partnerships, from my reading of the literature on the subject and analysis of my data for this study these partnerships experience too many systemic problems that thwart success in the partnership union or in enhancing student learning. The literature refers to such partnering as entering a "third wave" (Townley, 1989, p. 4). According to Ashwell and Caropreso (1989) the reason for these evolving phases is the limited success of earlier efforts in partnership arrangements and the persistence of business to enjoy success. Marsha Levine, in her capacity as Associate Director, Educational Issues Department, American Federation of Teachers, summarized these "waves" as "adopt-a-school programs; business volunteers working in the schools; donations from businesses, ranging from surplus furniture to computer systems" (cited in Berman, 1987, p. 25).

Business-education partnerships can range from collaboration on projects by the participating partners, to formal and informal arrangements for services and/or goods provided, such as the ITM program. Partnerships may be *formal* in the sense of there being a contractual arrangement between the business and the school. In a formal arrangement, obligations and expectations are mutually agreed upon in return for goods, services or program development. Partnerships are *informal* if there are no particular contracts, conditions or obligations that must be met, such as guest speakers from business or curriculum material supplements. Functional arrangements, or transactions with business for products and services needed for schools to function (e.g., paper, chalk, power, cleaning supplies), do not constitute a partnership. In business, functional arrangements for operating needs are not regarded as a partnership and I am adopting that understanding here.

Categories of Business-Educational Partnerships

After this study began, and from an initial reading in the literature, I experimented with categorizing types of partnerships in an attempt to understand better the nature of business-education partnerships. This led to three categories. These are *Material/Financial Resources, Human Support* and *Curriculum Collaboration* (see Appendix 3 for further discussion of these categories). Epstein, Coates and Salinas (1997), in their work on community-education partnerships, provide 6 categories of partnership involvement, such as volunteer or material goods, or resource speaker, as a means of understanding the complexity of just the partners' involvement. Jones and Maloy (1988) developed a similar list as categories of partnerships. These lists seem to serve well as detailed subsets of the major category headings I am proposing.

⁶ By "program" I am thinking of a broader application that encompasses curriculum components and materials and curriculum projects.

The category of *Material/Financial Resources* covers all material or financial resources provided to a school as a support to the curriculum or school programs, such as curriculum supplements, hardware and software components, building space, or a monetary arrangement.⁷ The category of *Human Support* relies on personnel who provide a supportive role in a curriculum component or resource, such as a guest speaker. Finally the category of *Curriculum Collaboration* exists where representatives from education and community, e.g., business, work together on the development and/or delivery of a curriculum or a curricular project.

There is a possible fourth category, *Education Collaboration*. Inasmuch as I have been able to ascertain, examples of Education Collaboration do not exist, because what is necessary for inclusion in this category is a concerted effort to apply systemic thinking to the whole of education and would include the collaborative participation by policy-makers and decision-makers, educators, parents, community and students. From the choice of architecture and the school's setting, to the purposes and form these would take, to the suppliers of the goods and services, the systemic factors of education would be fore fronted throughout this collaborative process.

Among the participants in this study, the first three types or categories of partnerships were represented. Regardless of the situation or kind of partnership, the depth of collaboration depends on the participants' sense of trust of each other, as

⁷ School sports or arts sponsorships and scholarships are arguably a form of partnership under this category heading insofar as one accepts that school sports and arts or scholarship programs are deemed curricular components of education. Some educators will counter that these activities are not a legitimate part of the curriculum but *extra-*curricular. Sponsorships that are purely monetary, such as exclusive territory arrangements, would fit under a separate category of general education funding.

well as the sense of benefits to be shared in partnering. Part of the reason that participants in partnerships may prefer a kind of default low-level partnering arrangement, such as in material/financial resources and human support, is because of uncertainties around the sense of shared perceptions and intentions. This study addresses those uncertainties, as well as providing a basis for working through them to more substantial forms of partnership exchanges and greater learning on both parts.

Background and impetus for this study

My interest in business-education partnerships began in 1996 when I investigated the impact of Information Technology Management's (ITM) business principles in the culture of education and on the public school IT curriculum in several British Columbia schools. I found initially that some educators were suspicious of business working closely with education. An administrator at one of the schools employing ITM, for instance, was adamant that business should not be mixed with education, insisting that "they should remain separate" (Després, 1996a, p. 26). One of the participating IT teachers at the same school believed that ITM was being used "to directly meet [the company's] own needs...at the expense of the teachers and students involved...They always push the corporate model for use with the program" (*ibid*). Elsewhere, some interviewees indicated that the teachers' union officials had problems with the implementation of ITM over job jurisdictions. In general, educators do not like outsiders to come into their domain (D. Hargreaves, 1995).

⁸ Nothing came of these concerns with ITM. Nevertheless, that the union even hinted at possible action against student involvement in work projects that benefit the school, such as programming an office computer for a secretary, raises questions of relevancy in education and the ethics of enabling students gain valuable hands-on experience.

They like it even less when business reportedly denies that schools are doing an adequate job of preparing adolescents for the workplace in even the basic workplace skills listed, for example, by the Conference Board of Canada (M. R. Bloom, 1997).

The Bottom Line

Business takes one of two distinct approaches, or some combination of the two, when it comes to working with education. There is the business that is interested in commercial gain as its primary focus and there is the business that acts as a community member with a primary interest in assistance. Within this latter group, some businesses see a vital link between educational goals and the national economy. Nowhere did I find in the literature or among business people I interviewed an interest in schools producing pre-established, assembly-line drones as some educators fear. Neither did I discover businesses in the participant groups I interviewed that were bent on capitalizing on the captive market of students. There was certainly an unabashed admission by business that they would like to see graduates readied for the workforce by being more prepared in the essential skills and attitudes, such as team playing, creativity, problem solving, independence, that figure in the general employability skills, for example, of the Conference Board (1997) or the federal government's Human Resources Development Canada.

But should business play a critical part in the education of youth? Most students will enter the business workplace at some point, and would thus do well to know something about it. What, if any, is to be the role of business in the education that goes on in public schools? How can business help without usurping the

⁹ I did try to contact two international companies—a burger chain and a soft-drink provider—to interview, but neither one responded to my calls and faxes.

educator's role for a broadly based education that extends beyond mere job preparation? These are the types of questions that education and business need to explore in the discussion about partnerships because they demand an examination of the participants' values and goals as well as their perceptions of education and partnerships.

Education Goals

Formal K-12 education serves several purposes in society. The numerous educational purposes could be subsumed under four broad themes: learning as its own end, social reproduction (including social responsibility), workplace preparation, and personal development. Most of the educators whom I interviewed expressed a preference for learning for its own sake, just as they supported personal development. The theme of "social reproduction" is to make of education an acculturation agency (Contenta, 1993; Freire, 1974; Giroux, 1995; Macmillan, 1998), wherein youth learn the prevalent hegemonic structures and "official knowledge" of society (Apple, 1993). Education in this context is also a social sorter within society (Anyon, 1980), or a means of "dividing the world" (Willinsky, 1998). Another theme is preparation for the workforce and higher education (Organization for Economic and Cooperative Development [OECD], 1997). And according to some researchers, the goals of education may encompass all of the above and more (Schweitzer, Crocker, & Gilliss, 1995; White, 1982).

¹⁰ Maehr and Midgley (1996) speak of 2 main goals in education: tasks and ability. Task refers to learning for its own sake. Ability is about the skill set and outcomes from knowledge. The 4 categories I have set up easily fit with, and expand upon, Maehr and Midgley's goal set.

For business, with its principal interest in the "bottom line" and profit, emphasis is placed on those educational goals that tend to be focused more on workforce readiness. Consider, for example, the Conference Board's business-education partnership mission statement: "But our involvement has a more self-serving motive: Businesses need educated workers and consumers. The region's economy cannot continue to prosper if companies lack employees with the most basic educational qualifications. A poorly prepared workforce acts as a drag on the economy of the entire region and state" (Files, 1989, p. 43). This mission statement continues with: "Since the public school system is the principal feature of employees for local business, stimulating improvement in the design and delivery of a quality education became the logical mission" (p. 46). The emphasis on workplace readiness is a common theme raised by some researchers (e.g., Ashwell & Caropreso, 1989; M. R. Bloom, 1995; Marshall & Tucker, 1992).

Within the legislated mandate of education, such as found in the British Columbia Ministry of Education's *Information Technology 11 and 12: Integrated Resource Package* (IRP; 1996), the vocational interests of preparing students for the new workplace are implied. The IRP states: "Students must be self-reliant as well as good communicators and problem-solvers. They require interpersonal, academic, and technical skills, and must demonstrate an ability to work independently and as part of a team" (p. 1ff). Other researchers have noted that education tends to be out of synch with the economy. For example, Lowe (1997), in his study of educational and cultural change, comments on the social emphasis of educational goals. He claims, "one key reason for the fact that the economic revolution of this period [1960s-1990] occurred with little reference to the formal education system was that

the school remained committed to other ends, including the maintenance of social difference involving the preservation of established elite routes and the prestige of liberal studies" (p. 165). Busby and Graham (1994), a teacher and a professor of curriculum, point out in an article about vocational education that "when employers criticize the education of graduates [from high school] they are assessing them in terms of the work skills they will be required to perform in the workplace while educators assess them on school assignments which frequently have little or no relationship to work-related tasks. This is the essence of the debate over preparedness" (p. 303). In other words, business and education emphasize contrary educational goals, or the very least they are speaking past one another. In a businesseducation partnership, the degree to which perceived educational goals differ by the two systems is bound to generate problems throughout the partnership arrangement, unless there is an opportunity to work with and respect those differences, especially as one source of difference, as I will show, is a misunderstanding of each other's goals on the part of business people and educators.

Educational Relevancy

The question of relevancy in education spirited the Conference Board¹¹ to commission a research report on the restructuring of education. The report declares that, "the education system needs to be different—and in fundamental ways" (Berman, 1987, p. 1). Accordingly, Bill Clinton (1987), while Governor of Arkansas,

¹¹ The American-based Conference Board is a research organization touting itself as "the world's leading business membership and research organization, connecting senior executives from more than 2,900 enterprises in over 60 nations" (Conference Board, 1999).

insists in the same Conference Board Report that, "education must go through a second wave of reform which goes to the heart of the learning process—focusing on how schools are run, how teachers teach, what students do, and what...[is required] in the way of regulations or paperwork" (p. 10). Clinton continues, "the key success in the next stage of reform is to get people inside and outside the system [of education] to work in tandem" (p. 11). Although the context of the foregoing is American education, similar educational practices correspond with Western education as a whole. The implication of the Report is that education is not meeting the needs of business, nor is it fulfilling part of its mandate of preparing youth for eventual inclusion in society as, what the British Columbia Ministry of Education (1992) calls, "productive citizens."

Business tends to look ahead to the effects of education on the economy and, more so now, global competition. Educators tend to focus instead on general knowledge as an adequate "preparation" for life after school (Busby & Graham, 1994). Because the two cultures function according to two different paradigms, they can come to loggerheads, as each insists on, practices and defends its vision of the (best) goals for education. Where the problem becomes particularly noticeable is in business-education partnerships. Kolderie (1987), in a Conference Board report, indicates that:

What is at risk in [business-education partnerships] is performance. Within broad limits, the system provides the schools with what they need, whether or not they make improvements, and independent of how well the children learn. If the schools do try hard to improve—as many do—nothing very good will happen to them. If they fail, nothing very bad will happen to them. The accountability system is fundamentally defective. (p. 20; italics in original)

Whether the perceived problem in partnerships is accountability or, as is evident from the literature, a myriad of problems, the fact is business-education partnerships are problematic. The systems of business and education sometimes speak a similar language, which I demonstrate later in this dissertation, but in partnerships they fail to mix well, much like the cliché of oil and water. Instead there ensues an imbalance that has led to partnering with education as a limited arrangement. An examination of participants' perceptions of partnering together unveils unexplored areas, places where the roots of the problems in business-education partnerships can be contemplated systemically. Business and education differ in the value they place on education, but they are inextricably linked. Students will need jobs and business needs employees and consumers.

As I will show in the next chapter, writers have commented at some length on the relationship between education and the economy. On that subject some writers insist on the need for a more concerted effort by the cultures of business and education to collaborate together, not only to enhance the learning experience of students but also to ensure realizable educational goals that are relevant to the needs of students and of society (OECD, 1997; Busby & Graham, 1994; Eraut, 1994). Indeed, Carnoy (1997), in a report on the economy and education, emphasizes collaboration between these two cultures in order to achieve greater social and workplace relevancy. The report states:

The individualization of work and the undermining of social organization based on work is not re-equilibrated by families, communities, and public institutions. *The whole system of relationships among these cornerstones of our societies is at stake.* Piecemeal measures destined to increase the number of jobs or to train workers better will not be able to address the whole set of interactions triggered by the processes of technological and cultural change that are at the root of the information society. We need to design new public

policies, business strategies, and personal projects. These must aim to reconstruct a set of economically productive and socially fulfilling relationships between work, family, and community in the new socio-technical paradigm. (p. 10; italics in original)

The source of much needed change in social institutions, especially education, is "the new socio-technical paradigm." The impact of IT on societies around the world has necessitated a reconstruction of the interaction between the workplace and the community. Jones (1992), in her discussion of educational goals and workplace readiness, speaks to one aspect of the OECD claim. She says:

If the vocational-academic gap is to be truly bridged...first and foremost there will need to be a more collaborative culture in the workplace...[and] schools and colleges themselves will need to be run more collaboratively...In short, there needs to be a more collaborative culture of partnership within the business/industrial workplace, between the workplace and schools and colleges, and within the schools and colleges. (p. 267)

Although Jones' assumption of a gap between education and workplace readiness needs testing, and while her exhortation for an "inclusive" community of business and the various levels of education sounds plausible enough, what does that look like? Without the consideration of the roots of the problems and benefits between business and education, collaborations will continue to meet resistance and limited success. As an example of this reticence to collaborate, the business partner involved in the development of the ITM program had this to say about education:

You have to understand that business eyes public education with great suspicion. Except for the textbook publishers and school bus companies who have created a dedicated line-item stability in their relationship to the school, most businesses are wary of working with the educational market, not only because schools expect handouts, but because there is a perception that education lacks both capital and business acumen when it comes to planning and managing such things as technology. An example of this is how schools deal with the costing of computers. Business knows that the hardware and software amount to only 25-30 percent of the cost of introducing this technology into the workplace, while technical services and training cover the rest. Meanwhile, schools budget 100 percent for hardware and software and

leave support to either the grace of God or over-worked teachers. It almost guarantees frustrations and business is reluctant to get involved. (Forssman & Willinsky, 1999)

The more I delved into the ITM program, as a researcher, mentor and project manager, the more evident it became that both educators and businesspersons had divergent perceptions of each other. The two developers of ITM—one a business consultant (Forssman) and the other an academic (Willinsky)—note that in those early stages of ITM's genesis, "we risked losing the support of some teachers, educators who have adopted a deep suspicion of the corporate agenda as anti-intellectual and too narrow in its pursuit of education as 'skills development'" (http://web.archive.org/web/19970102105448/http://knowarch.com/).

Maehr and Midgley (1996), in their general assessment of the cultures of business and education, point out that it is only as one encounters and engages the cultural tensions embodied in the concept of the partnership can there be any hope of sustained success. Success may mean continuation with the partnership arrangement or, conversely, arresting the partnering process. But these cultural tensions are only one facet of business-education partnerships. There are other interrelated factors that render partnerships complex. It is only as one "encounters and engages" the systemic factors of partnerships that success could be more attainable, or at least lead to a better approach to partnering.

As I continued my research within one educational community I discovered an underlying tension that appeared rooted in a systemic mistrust between education and business. On the one hand, I saw that businesses acted supportively in their local community, particularly in the public schools, through financial or material donations, sponsorships and classroom visits to speak on a given subject. On

the other hand, in the majority of instances that I found, and which converges with the literature, educators were leery of any business involvement beyond a one-way provision of company information or material/financial resources. I discovered that some educators justified resistance to business collaborations in education on the grounds that education was already doing an adequate job of preparing students for life after school. At the same time I found that business people believed that if the schools were doing a good job, they would be seeing more of the benefits, such as prepared students/workers with relevant skills, than they currently were.

Methodology

As part of the research for this study, I interviewed a sample group of fourteen educators and twenty-four students, the majority of whom were involved in the ITM business-education partnership (see p. 3 for explanation) in the general environs of the Lower Mainland of British Columbia. I also interviewed nine representatives of businesses, the majority of who were involved in business-education partnerships. The purpose of including some individuals with no direct business-education partnership experience was to obtain general information from a slightly broader cross-section of the community. This helped me to determine whether the additional information might be beneficial to the discussion of perceptions of business and education in partnership.

The four key chapters that deal with the data are set up according to the questionnaire and the data collected. These are: business, education, workplace and partnerships. I provide analyses of the presented data at the end of each of these four chapters under key, systemic categories.

The idea of applying systemic thinking to my analysis of the data arose during my reading of the literature, especially Flood's (1999) extension of Peter Senge's *The* Fifth Discipline: The Art and Practice of the Learning Organisation. The examination of people's perceptions is a challenge: what means of making sense of the chaos of data could assist me to produce a coherent response that would speak meaningfully to business and education in partnership? In the initial stages of preparation for this study I had contemplated analyzing the data from a more ethnographic standpoint (Holstein & Gubrium, 1994; Janesick, 1994; Schwandt, 1994). After all, in many respects I was re/telling the stories of the participants who might have something to say about business-education partnerships. I was interested in the perceptions of people, but I wanted a means of ensuring that this qualitative work could be useful beyond the re/telling of stories (G. L. Anderson, 1994; Atkinson & Hammersley, 1994; Beattie, 1989; Cherryholmes, 1988; Ely, 1991; Fetterman, 1988; Goodson, 1992; Roman, 1992; Salomon, 1991). There is no doubt that I am re/interpreting the data along lines that I have drawn. Such is the nature of qualitative research (Aitken & Mildon, 1991; Goodson & Clark, 1989). These were not the developed stories that could provide enough details about partnering that I believed would be sufficient or beneficial to future endeavors in partnering. The data and the topic of businesseducation partnerships, as well as my interest in interpreting the data and literature in a way that would be "fresh," demanded something different (Byers & Fitzgerald, 2002; Goodson & Mangan, 1996; House, 1991). It was the idea of systemic thinking that stirred me to contemplate its application in my research. In a sense, I have compiled aspects of qualitative research methods with the application of systems thinking as one way of drawing meaning from this study.

I have adapted Flood's (1999) work and Bett's (1992) definitions by incorporating three main systems clusters under which the various participant perceptions of partnerships can be subsumed. In this dissertation I have labeled these three clusters as Systemic Purposes, Form/Design and Structure, which utilize Bett's systems characteristics but in terms that I think are more appropriate to the discussion of organizations, especially the system of education. 12 My rationale for these headings is that for purposes of analysis and to increase our understanding of the complexity of business-education partnerships, or any event or organization, it would be beneficial to be able to seek patterns, or archetypes, that could afford comparative or more revealing qualities that enable dialogue to ensue between systems. Unlike the individualistic nature of Flood's four windows of systemic thinking, 13 the three systemic clusters that I am proposing broaden the analytical plain to include personal as well as corporate factors. These key categorizations arose after pondering the collection of respondents' perceptions and of how I could make sense of this data. The clusters help to build "holistic pictures of social settings [and suggest] systemic ways of coping with them that challenge the very idea of problems, solutions, and normal organizational life" (Flood, p. 6). This is a move away from a reductionistic tendency that would look at the individual parts, or data bits, such as in Maehr and Midgley's (1996) cultural tensions for example, in an effort to

¹² Betts (1992) explains systems in terms of openness and "characterized by three important concepts: hierarchy, homeostasis, and purposiveness" (p. 39).

¹³ Flood (1999) suggests that his "systems structure," "systems processes," "systems meaning," and "systems knowledge-power" coupled with "prismatic thought" "help to locate types of issues and dilemmas encountered in organizational life" (p. 94). Each "window" is still a personal practice. It is only through prismatic thinking, or looking through these four windows at once, that we can have multiple views on an event, issue or dilemma that in turn should provide us with a means of attending to the problem.

draw conclusions about the whole. In this way I am acknowledging the complexity of the systems of education, business and business-education partnerships.

For this study, the *Purposes* cluster designates the goals or missions, objectives and participants in a system. This cluster responds to questions of what the desired goals are and why those ones, who will be the participants that enjoy and instigate those goals, and the participants' roles and status. The *Form/Design* cluster comprises the organizational image, protocol, regulative principles, dimensions, and site and place, or geographic set up. The *Structure* cluster is concerned with questions of technique, or processes, governance and time frames. This cluster is concerned with the means or building blocks of achieving and sustaining the systemic purposes and articulation of the form/design. These clusters are not meant to stand in antithesis to one another but interact. The question of "why" figures throughout and enables alternative responses and reformulating any of the cluster factor details, or elements, in an attempt to arrive at the best understanding of a system, albeit temporal.

As I contemplated the responses of the participants along with the literature, it occurred to me that although among the responses there were convergent and divergent points in the end, there were many individual elements that were not so clearly convergent or divergent. For example, a participant will have expressed his or her perception of a partnership or cultural element mentioned by no other participant. That does not imply a divergent point, only that one individual mentioned that particular systemic element. That is when I realized that the complexity of my data and the literature information that I had were factors and elements pertaining to each of the systemic factors of purposes, form/design and

structure. These three systemic clusters help to locate common points of discussion and assist us by providing cohesive categories that ensure a better understanding of the systemic factors of the systems of business and education. As such, and given that this study, as I mentioned earlier, begins to map a range of perceptions of business-education partnerships, understanding what those perceptions are and what systemic factors are highlighted by them will help in the dialogue between business and education about the possibilities of partnering together.

As part of my analysis of the data, I set up four specific chapters. Chapter Three deals with the participants' perceptions of business; Chapter Four deals with the participants' perceptions of education; Chapter Five deals with the participants' perceptions of workplace; and Chapter Six deals with the participants' perceptions of business-education partnerships. In each of these chapters the analysis section examines the participant responses in greater detail under the systemic cluster headings of *Purposes Factors, Form/Design Factors and Structure Factors.* In some cases, as will be seen in some of the chapter analyses, some of the sections may be shorter than others. This is because from the data there were few or no responses in the particular category. This is not to suggest that people have no perceptions in those areas, just that in this sample group few if any responses were offered.

Sample Selection

The people who volunteered to participate in this study were drawn from the array of teachers and students with whom I had worked, or was working, in my managing of the ITM program in the schools. This work also put me in contact with business people a number of whom where also engaged in some form of partnering with schools. I had contacted two additional schools and asked for volunteers to

complete the questionnaire in writing, but no one from these schools responded. Of the forty-seven people interviewed, seven educators and students were direct contacts with whom I worked in ITM. All but three of the educators were capable IT users although IT as a definitive quality in the sample appeared to have no bearing on the responses given in comparison, for example, with the literature or the other participants' responses. Also, I had chosen two global corporations because they were global and well known that provide cold beverages or hamburgers, but the two companies refused to participate, ignoring my telephone requests and faxes to do so. The results of the data are not meant to, nor could they, be generalized across the population. The data and the subsequent analyses provided in this dissertation, however, do provide a unique perspective on business, education and their partnering together that has not been done to date.

The selection of research participants in this study carries with it some inherent weaknesses as well as strengths. For example, the predominance of participants who had some understanding and even experience with business-education partnerships might seem unrepresentative of the larger population of both educators and business people. In reading their responses, then, this familiarity needs to be taken into account, but from my perspective, it only provides a further context to their perceptions, rather than providing grounds for dismissing them as unduly biased. As the reader will see, these people represent a wide range of perceptions, which I try to map in ways that will help us to understand how people might view business, education and these two partnering together. Had I included a greater number of participants with no experience of partnerships, I may have found

different results, but by working with those closer to the actual experience at issue, the perceptions have a grounding that would otherwise not be available.

Throughout the presentations of the data I refer to individual participants with a letter designation after the name to indicate if they are a business representative (B), an educator (E), or a student (S). Table 1 below provides details for each of the participants. The majority of partnership examples in this study had arrangements with Bellevue School District and included the following companies:

- Larson-Simpson Technologies, an international IT corporation that donated IT equipment to a school along with training to teachers and students on how to use that equipment;
- Mason Good Investment Brokers provided training and supplies to students to create educational brochures about Canada Savings Bonds;
- SkyHigh Airlines, a domestic airline company, collaborated with a local school on an avionics program and student work experience;
- A travel agent from Gulliver's Travel agency collaborated with a local school teacher on a course about the hospitality industry;
- Makschift Engineering Ltd., a small international company that provided specialized boating and heating components, supported the school district's Career and Personal Planning program by hosting students in a "job shadow" arrangement. Job shadowing allowed a student from the school district to

¹⁴ I have included a summary of this Table in each of the data chapters to aid the reader in recalling the participants.

follow an employee from the company on the job for a brief period in order to gain a better understanding of the job;

- Knowledge Architecture, developer/implementer of the Information
 Technology Management program of online project management tool in schools;
- SportShoe (Canada) Inc., an international sportswear corporation.

The following table is a summary of the participants' status and their particular affiliation (note that Curriculum Collaboration partnerships are presented differently.

This is to highlight a higher-level partnership arrangement):

Table 1 Summary of participants in this study.

Participant	Responsible for	Services Offered/Provided
Don, Corporate, Administration (Larson-Simpson Technologies)	- Spearheaded workshop on use of Larson-Simpson computer technology equipment, maintenance of equipment	 Curriculum Collaboration partnership: Donation of company computer equipment, printers, peripherals; set up instruction for partners on
Greg (SkyHigh Airlines)	- Administrator for SkyHigh Airlines; co-spearheaded SkyHigh's participation in education work experience placements (aviation mechanics: general maintenance, shop training), as well as local collaborative teaching of avionics program	how to use the equipment Curriculum Collaboration partnership: avionics; simulator, curriculum materials, liaise with school district and school;

Section of the sectio		
Mike (SkyHigh Airlines)	- Senior mechanic and union representative with SkyHigh Airlines; co-spearheaded SkyHigh's participation in education work experience placements (aviation mechanics: general maintenance, shop training), as well as local collaborative teaching of avionics program	Curriculum Collaboration partnership: avionics and mechanics; simulator, curriculum materials, liaise with school, oversees work experience placements in the company
Jens (Makschift Engineering)	- President and contact for co-op program: "apprentice"-style	- Engineered sophisticated components for boats and
	participation (limited)	diesel engines; Human Support partnerships
Dawn (Knowledge Architecture)	- President/CEO Knowledge Architecture, principal developer of ITM program; liaise with school districts and schools for implementation of ITM; support, workshops; project management; framework.	Curriculum Collaboration partnership: ITM program. ITM's curriculum materials were developed as a collaborative arrangement between the company and educators working together. Service consisted of ITM support persons working as co-teachers in the classrooms of participating teachers. Support appeared as facilitating the implementation of ITM, some teaching, cooperating with the teacher on evaluation and project development, online communications and guidance, workshops and tele-conferencing.
Kevin (Mason Good)	- Investor-broker and contact/liaison between brokerage firm for stocks, bonds, investments, information and a local school	- Information pamphlet for public concerning bonds and savings; Material/Financial Resources partnership

Chantal (Gulliver's Travel)	- Travel Agent and co-curriculum deliverer at a local high school concerning the hospitality industry	 Curriculum Collaboration partnership: supplements (student handouts): coteach and provide information about hospitality and the hospitality industry
Karen (SportShoe Canada Ltd.)	- Administrative contact for education sponsorships	- Sportswear sponsorships and Material/Financial Resources partnerships
Bob (Learning Society)	- President of business-education partnerships group; information and dialogue on business-education partnerships.	- N/A
	- Superintendent Bellevue School District; executive decisions, leadership over all facets of the school district, liaise with government Ministry of Education	- Leadership over all facets of the school district
Aaron	- Leadership and management in the school	- High school administrator; leadership and management in the school
A/.	- IT instruction, ITM, leadership in the department	 Curriculum Collaboration partnership: ITM implementation; IT teacher and department head
Colin Mariana	- Research and direction	 Curriculum Collaboration partnership: ITM development and support; University professor
Robin	- Teaches business education, Career and Personal Planning, liaise with businesses in community	- Educator
Kris	- Teaches ESL, photography	- Educator
Ralph	- Teaches IT, school administration	Curriculum Collaboration partnership: ITM implementation; Educator
Blair	- Teaches avionics, shop, liaise with SkyHigh Airlines	 Curriculum Collaboration partnership: avionics and mechanics; Educator
<i>Leslie</i>	- Teaches IT	 Curriculum Collaboration partnership: ITM implementation; Educator

Annika	- Student	N/A
Karl	- Student	N/A
Nicol	- Student	N/A
Gordie	- Student	N/A
Henry	- Student	N/A
Jason	- Student	N/A
Frank Steve	- Student	N/A
Huang Frank	- Student - Student	N/A N/A
(A) 7 (A)		N/A
Dave	teacher-on-call - Student	N/A
Otto	- University researcher and	- Educator
- 14 C		implementation; Educator
rerumanu	- reaches ii	partnership: ITM
Matt Ferdinand	- Teaches sciences - Teaches IT	- Educator > Curriculum Collaboration
Eunice	- Teacher Teaches social studies	- Educator
	Gulliver's Travel	(with Chantal); Educator
	hospitality, liaise with Chantal of	partnership: hospitality
Carrie	- Teaches home economics,	Curriculum Collaboration

Interview Schedule

I developed the interview questions for this study following reports I had completed on ITM (Després, 1996a), and on a site-based teacher education project (Després, 1996b). While conducting the interviews for these reports I noted apprehensions that educators had towards outsiders (the "outsiders" were business and the university respectively). I decided to focus my questions on general aspects of business and education. I grouped the questions under three loose categories (the final interview schedule is found in Appendix 2); namely, "technological proficiency,"

¹⁵ This group of students was interviewed *en masse*. It was a younger grade and did not provide data that added to or took away from the other subjects.

"business-education partnerships," and "understanding of the cultures of education and business." The inclusion of technology-related questions was a direct result of my initial work in ITM and had more to do with the role that Information Technology (IT) plays in business.

As part of the interview schedule, I showed this table of workplace characteristics to the participants and asked them to comment on the characteristics. I also showed to the participants a chart that I had developed depicting three business-education partnership categories (see Appendix 3), asking them to provide feedback on its utility and clarity in the discussion of business-education partnerships. The three business-education partnership categories are Material/Financial Resources, Human Support and Curriculum Collaboration. 16

As I posed the interview schedule questions to the participants, I began to realize that some of the information that I was asking for was proving to be irrelevant to what I was really interested in. That is, questions about the usage or effectiveness of IT in schools or personal use of IT were eventually dropped as these had no bearing on partnerships or understanding of workplace. Other questions were migrated to different categories, such as "understanding of workplace" and "social skills one needs for the workplace," which in turn I placed under "cultures of education and business" because they tended to fit better there. ¹⁷

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¹⁶ I had begun originally to show four business-education partnership categories: Functional Support, Beneficent Support, Human Support and Curriculum Collaboration. After further research and reading I rearranged the categories to what they are now.

¹⁷ I asked the interviewees for a distinction between "nature of education" and "culture of education." Respondents reported no distinction between the two concepts. Hence, in this dissertation I make no distinction between the two concepts. However, I have included a brief essay on culture in Appendix 6 that relates tangentially.

Conclusion

Business-education partnerships continue to be problematic in their purpose and structure. And although partnerships are viewed as a means of acquiring much needed funds and materials for education, they are equally troublesome to educators. There has been no systemic thinking applied to the study of the perceptions of business-education partnerships. Writers, instead, have been critiquing individual factors and elements of business-education partnerships, such as corporate motives or educational reform, without being aware that business-education partnerships are complex arrangements in need of a systemic thinking approach. Systemic thinking applied to the analysis of such partnerships, including the perceptions of them, will shed light on the factors and their elements that will enable a proper framework for partnering to be developed. This study will present an analysis of a range of perceptions of business-education partnerships as the beginning steps to fully understanding their complex nature and to be able to make more knowledgeable decisions about partnering.

PROFILE OF BUSINESS AND EDUCATION IN PARTNERSHIP: A REVIEW OF THE LITERATURE

Leaders from all sectors of U.S. society are virtually unanimous in their agreement that education is of vital importance to the enterprise system and to our way of life. Concern about industrial competitiveness has added fresh urgency to efforts to improve the learning process through business-education partnerships. (James T. Mills, cited in Berman, 1987, p. v)

The industrial system, by making trained and educated manpower the decisive factor of production, requires a highly developed educational system. If the educational system serves generally the beliefs of the industrial system, the influence and monolithic character of the latter will be enhanced. (Galbraith, 1967, p. 370)

In Chapter One I noted that in general business-education partnerships are meant to be mutually benefiting experiences. However, the reality of business-education partnerships for the past forty years is that they have been, and continue to be, problematic to business and education as well as to some concerned individuals. Ashwell and Caropreso (1989), in their report for the Conference Board, insist that if business-education partnerships are to be "absolutely crucial," then something must be done to ensure that those partnerships function effectively, intelligently and beneficially for all concerned. Conversely, as more is revealed about the systemic factors of partnership arrangements, education stakeholders and participants in partnerships may wish to rethink business-education partnerships. Part of this process of examining the systemic factors of business-education partnerships involves understanding the discussions around these partnerships.

This chapter examines the literature on the subject of business-education partnerships, which includes business, education and workplace as the necessary stage for analyzing the data that I collected. I have deliberately limited my

examination of business, choosing to focus on perceptions of some of the systemic elements, or details, that comprise its nature rather than getting into full discussions about marketing, supply and demand, corporate and small business philosophies, financial analysis, mergers and acquisitions, business law and so on, simply because to do so would take far more than is warranted for this dissertation. Those systemic elements demonstrate the complexity of business. This is not to say that those topics are irrelevant, just that they are not crucial to my thesis.

Business-Education Partnerships Defined

From the first chapter, a working definition of business-education partnerships is an agreement between business and education with an ideal purpose of enhancing student learning wherein education receives material and/or financial resources or human support assistance through visits or collaboration on a curriculum project (Conference Board of Canada, 1997). Sponsorships are sometimes called partnerships. Sponsorships constitute a limited or exclusive arrangement for a specified period of time and do not appear to function as true partnerships. Their primary purpose is to supplement resources for education and to provide some profitable advantage for participating businesses. The textbook and school bus industries are other examples of non-partnership arrangements. These capitalize on education's dependency on external support (Apple, 1991; Lorimer & Keeney, 1989). Given the mercenary incentive and lack of "value surplus" (i.e., not over and above the corporate mandate for profits), these industries seek vendor-consumer (contractual economic) arrangements.

But the Conference Board's (M. R. Bloom, 1997) "shared values" and enhancement of student learning are not the only criteria for defining business-

education partnerships. Indeed, there is an immediate tension just in terms of a useful definition of partnerships depending on which camp one is in. Businesses and business-friendly organizations emphasize the Conference Board's link with positive and mutually edifying benefits but with an emphasis on the benefits to education. Critics of business and education partnering together, however, define these partnership arrangements as strongly favoring business opportunities to profit from the new and captive market of students (Boyles, 1998; Molnar, 1996; Robertson, 1998, 1999). Boyles critiques such partnership arrangements as no more than a continuation of the business bottom line, or capitalizing on "consumer materialism" (p. 1). Either way, and the rhetoric aside about student learning enhancement, business-education partnerships are useful arrangements between education and business in which education stands to receive additional funds while business turns a profit from this arrangement.

Systemic Thinking In Education

Systemic, or systems, thinking in education has not seen a great deal of successful applications. The difficulties with applying systemic thinking in education are not only because of the complexity of the education system but also because of systemic factors in education that compound its application. Garmston and Wellman (1995) make a connection between the developments in science, specifically "quantum mechanics, chaos theory, complexity theory, fractal geometry, and the new biology" (p. 6), and how these sciences "can help educators rethink their approaches to school improvement and work in new ways within the principles suggested by these sciences" (p. 6). Although some resources exist that attempt to apply systemic thinking in education (see Case, 1992; Isaacson & Bamberg, 1992),

the paucity of such examples raises some possible concerns, including the misunderstanding of what is meant by systemic thinking. According to Betts (1992), for example, "the word *system* has been popularized without a fundamental understanding of its implications, to the point where everything is a system but nothing is really treated as one.... Decision makers need to fully understand why our current approaches [in education] won't work and what is different about the systems approach" (p. 38), a message that was passed on by von Bertalanffy (1981) in his discussion of systemic thinking in education.

Yet, Garmston and Wellman (1995) also note that the "high school also serves as a striking form of an adapted—not adaptive—organism. Designed in another time, for the purposes of that time, the typical high school often shows a remarkable lack of flexibility" (p. 6). Peter Senge, author of *The Fifth Discipline: The Art and Practice of the Learning Organization*, gives a caveat of sorts about the application of systemic thinking in education in an interview (O'Neil, 1995). He denies that schools are learning organizations (p. 20). At the same time he also identifies key principles that need to be in place in order for schools to become learning organizations. These are "where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together" (Zemke, 1999, p. 49).

Systemic change, however, is difficult, as Senge said (O'Neil, 1995) and that B.

L. Anderson (1993) also admits in her discussion on the subject. A critical reason for the failure for schools to become such organizations has to do with the structure and purposes of schools, such as the isolationism and the political nature of formal

education.¹⁸ Although B. L. Anderson argues a case for a matrix of systemic change that has practical implications for the system of education, Betts (1992) explains five key areas in education that thwart systemic change and the application of systemic thinking in education. He says systemic reform in education has been hampered because of "the piecemeal, or incremental, approach; failure to integrate solution ideas; a discipline-by-discipline study of education; a reductionist orientation; [and] staying within the boundaries of the existing system (not thinking out of the box)" (p. 38).

Flood (1999), in his study on systemic thinking, and that corresponds to Betts' (1992) definition of systems thinking, describes systemic thinking as follows:

Systemic thinking explores things as whole and is highly relevant...because the world exhibits qualities of wholeness. These qualities of wholeness relate to every aspect of our lives—at work and at home...Life events can be made sense of in a meaningful way only in the knowledge that our actions contribute to patterns of interrelated actions...The world is whole and the whole is complex. It is increasingly complex with more and more information, intense interdependency, and relentless change. (p. 13)

Systemic thinking has been around for millennia. Although not called "systemic thinking," the rudimentary principles were there and have shown through on occasion, such as in Sun-tzu's (1994) military writings *circa* 500 B.C.. Sun-tzu's military work is more than a collection of strategic planning principles that have been adapted since then for business predation and competition. Sun-tzu says: "Warfare is the greatest affair of state, the basis of life and death, the Way (Tao) to survival or extinction. *It must be thoroughly pondered and analyzed*" (emphasis added, p. 167). In a fundamental way, he was thinking systemically. He was adamant that military

¹⁸ For Fullan (1996), what began as an article about the problem of systemic thinking application in education turned into a misapplied tour of systemic change.

officers and decision-makers take stock of systemic factors before engaging in war.¹⁹ Failure to do so was certain to bring defeat.

The foundations of what we call systemic thinking came into being in the 1930's and 1940's largely as a result of Open Systems theory, which challenged the closed systems view of things in biology and the sciences. Seeing organisms as interrelated and forming complex associations, a growing group of scientists led by scientist, Ludwig von Bertalanffy, at the time began to expand their scientific view of the world to include systemic factors. Their Open Systems theory developed into what they called, General System Theory.

Complexity Theory developed from General System theory in the early part of the 1990's. Complexity theory "appreciates the world as a whole, comprising many, many interrelationships expressed in endless occurrences of spontaneous self-organization" (Flood, p. 2). Complexity theory is a strand of systemic thinking. "Systemic thinking" per se came into being in the 1990's as well, though primarily in business. However, systemic thinking still struggles against the ever present "mainstream thinking" that pervades "present-day living" according to Flood (p. 27).

Systemic thinking provides a mode of building what Flood (1999) calls, "holistic pictures of social settings. [Systemic thinking] suggests systemic ways of coping with them that challenge the very idea of problems, solutions, and normal organizational life" (p. 6). Events and organizations are not static but are dynamic. Because life events are connected and solutions can be complicated, the approach to

¹⁹ Sun-tzu developed five factors to be considered in preparation for war. These are the "Tao" (shared vision of the people), "Heaven" (climatic elements), "Earth" (terrain, distance, facility), "Generals" (wisdom, courage, benevolence) and "Laws" (regulations, logistics).

understanding these events is unlikely to be (arguably will never be) a linear progression of neat direct cause and effect relationships, but rather a series of causes and effects.

A differentiation must be made between systemic thinking and reductionistic thinking. The reductionistic approach to understanding the world by examining its parts is limited in the information that it provides. Breaking a system down into its constituent parts assumes better understanding of the whole but, according to Flood (1999), only leads to a better understanding of the parts. Systemic thinking stands against reductionism by demanding not only that we examine an event or problem itself, but also the contextual and relational environment of that event, organization or problem. In this dissertation the application of systemic thinking in the analysis of the data provides the means of such an examination.

On Business

To better understand the complexity posed by business-education partnerships we must examine the systems of business and education that are coming together. This is not to say that the complexity of business-education partnerships is the sum complexities of business and education. But by analysis of the systems of business and education we will have a better appreciation for the demands and complexity of their partnering together.

In his examination of the culture of business, Alexander (1977) traces the foundation of capitalism, which helps to understand business "as an economic-cultural system, organized economically around the institution of property" (p. 47). He continues: "In essence, capitalism is a culturally and morally neutral sorting mechanism, a means of allocating scarcities and giving them a price. In so doing it

creates modes of organization and production, modes of life, and wealth" (p. 101). In defense of capitalism he argues that it "is not an ideology but a) a crucial procedure, b) a self-transforming system, c) a shaper of everyday life, and d) that its 'past is a foreign country'" (p. 198). In short, "[b]usiness has become an inseparable part of the structure of nations" (p. 120). The exchange of goods and services for payment reaches to every continent on the globe. The exchange of goods and services for a price is one of the defining characteristics of business. The price business receives for its goods and services determines the profit, or the "bottom line."

As a further explication of the nature of business Alexander (1997) also declares:

Two value systems arose and persist—the ethos of success and the ethos of conviction. The aims and objectives of business capitalism—size power, profit, market share and wealth—are driven by the ethos of success. All the "virtues" of this world—neighborliness, familiarity, faith, hope, justice, charity, fortitude—are vested in the ethos of conviction. Its weakness is that none of these makes money...It is nonsense to think that perfect reconciliations can be found. The ethos of success has an indispensable and exuberant dynamic; and yet we cannot live with a reasonably settled ethos of conviction....In chess, or in mathematics and science, the ends are given and the means are a matter of aptness. But in human affairs and business reason and judgement decide the ends while reasonableness and conscience must decide the means. ... In either case it is certain that the "reason" that guides the ethos of success will, at some time, clash with the "reason" that guides the ethos of conviction. (p. 71, 78, italics in original)

Business operates within a rubric of competition, predation, profit and success and functions around the globe to fulfill people's needs and desires. Nevertheless, at some point conflict is bound to happen as the actions of business are confronted by conscience, whether the conscience of business or of society's members.

It is the nature of business to strive to gain an advantage over competitors, which is thus an act of inequality. Business, meanwhile, is caught in an arguably awkward ethical position. Alexander (1997) reasons:

Kant's most famous injunction is essentially this: Act only on the principle that you would want to become a Universal Moral Law. If a businessman [sic] tried to do so, his conscience would be tattered and torn...If he neglects [his duty to shareholders to do the best he can for them]...the laws of the country that he loves may punish him for omission...Which "universal" moral law is he obliged to heed? A "Universal Moral Law" for patriot-citizens, or a "Universal Moral Law" for shareholders' fiduciaries? (p. 88; see also Kant, 1969)

At the same time, some social philosophers, such as Simon (1992), suggest that because there is no—cannot be—an absolute reference point "within a neutral universe of reason beyond the particularities of time and space, [the] message of social construction and social contingency is one of hope...because it also suggests that there is no objective necessity or rational principle to justify the way things are, to legitimate the hierarchies and status quo distribution of wealth, power, prestige, and freedom" (Gary Peller, cited p. 16). But this viewpoint fails to understand that "freedom from" is not liberating after all but eventually enables others' "freedom to," including freedom to be and do whatever, despite Simon's pull to a Kantian kind of social responsibility. This has frightening implications for business and society, none the least of which is wholesale predation and the bottom line. Indeed, if the universe is silent and the affairs of people have no ultimate reference point, then what is a course of action and who decides are two critical questions left in tension.

Should business pursue the bottom line in partnerships with education irrespective of codes of ethics?²⁰ What Alexander (1997) suggests is that business has

²⁰ Lamb, Hair, McDaniel and Faria (1997), for example, have developed a practical list of general codes

a functional place in society that inevitably is bound to bring conflict at times as people wrestle over the drive for success and the reasonableness of profit, or the "ethos of conviction." This tug between success and conviction becomes all the more prominent in business-education partnerships. Out of this determination to achieve success, Alexander warns that the greater concept of culture and civility are at risk with business:

Culture...is the architecture of innovation, science, art, writing, and "cultural" activities, which builds on civilization and enriches it, renews it, or changes it...What concerns me is the dualism between the present ideals of civility of society and the harder-edged civility one often observes in the world of business. The latter's values—at times an almost complete reliance on the calculus and ethic of success—are in danger of becoming divorced from the ethic of conviction shared by both ordinary people and leaders outside the world of business. (p. 224)

He adds this about business: "Their primary objective, profit, while highly useful, is neither noble or [sic] ignoble. The limits of the power of money being what they are, money should teach humility to those capable of understanding these limits, while those incapable of understanding them will not understand anything else about business either" (p. 152; emphasis added). This distinction stands as both a challenge to "outsiders"—those who are not in business—and as a partial explanation about the nature of business. With the business drive to succeed, which differs from education's concept of success and which I will deal with further below, the potential of misunderstandings and resentment is very great as business lives out its philosophy. Where this potential can become especially prominent is in the case of business-education partnerships, especially as the participants and stakeholders confront differing perceptions of these partnerships.

of business conduct, such as philanthropic, ethical, legal and economic responsibilities (p. 624ff).

Business is also blamed for fueling societies' insatiable demand for more goods and a living ethic of "optimizing the bottom line" over and above a practice of "good Samaritanship" (Senyard, 1995). Alexander (1997) challenges business,

business has grown to be a dominant social force in our world—unwittingly and unintentionally. It has also, at least in the West—again, unwittingly and unintentionally—made a world which inclines to humanism though it has not yet attained it. If business does not join in this search for humanism wittingly and intentionally it will be out of phase with society; and if it continues to be out of phase, it will continue to come under persistent attack by the rest of society. (p. 81)

He also reasons:

[Although] business is a natural carrier of humanism and has a humanistic role, it has not assumed it. Dualism persists: business is still seen as a strange and sometimes alien incubus, with separate ways, mentality and mind from the rest of society. It is not understood, not loved, not even liked...This separateness of the world of business from society-at-large cannot comfortably continue in a world of foreseeable, ineluctable and increasing closeness and density. (p. 3)

Business, according to Alexander, must act out of its "ethos of conviction" for the good of society and the world as well as for its own long-term good. There is a utilitarian impetus for changing, which is to resist coming "under persistent attack by the rest of society" for acting out of a culture of indifference to society. There is also a social pressure on business to change, which comes both from society and from an awakening to its own roots and systemic link with society. Perhaps if this ethos of conviction were more prominent, business-education partnerships would not be as problematic. But the motives of business inside or outside these partnerships are only systemic elements that form a part of the complexity of problems in business-education partnerships.

Change and Business

Social influences have an impact on the business environment. An example of social changes whose effect on business could move a company in a positive or negative direction is found in Bill Broadway's article in The Washington Post (2001). He says:

Talk of soul and spirituality is flowing freely in the workplace these days. Many chief executives are unabashedly defining their companies' business mission in moral terms. Some are adding a dimension of social responsibility through environmentally friendly practices. Some pay employees to mentor students or work at homeless shelters. Others have infused their employee handbooks with ethics-based philosophy or altered workday routines to allow time for meditation, yoga or napping. (p. A01)

Broadway's point is that some corporations do, in fact, take seriously social transformation ideas and apply different practices in their businesses that prove to enhance success and employee satisfaction. Fundamentally the drive to incorporate a higher social conscience, or ethos of conviction, in business is the belief, in this case, that "a business should demonstrate social responsibility not just through donations to charity but in its core operations and programs" (Broadway, 2001). Social integrity is important for business, too. Nevertheless that does not prevent some businesses from exploiting such trends. Broadway quotes one researcher who believes, "the notion that a company is founded on moral principles can be used as a 'justifier strategy' for almost any business decision. It becomes easier, for example, to lay off employees when top executives believe that their mission is inherently virtuous."

Lamb, Hair, McDaniel and Faria (1997), in their marketing manual, indicate social, demographic, economic, technological, political and legal, and competitive forces as the influential factors that confront business (p. 18). These factors influence

varying degrees of change for business. Alexander (1997) confronts business and insists that change is imminent for the future. He states: "No single corporation has much more at heart than its own problems and, at best, the problems of its immediate, identifiable stakeholders. To find a broader perspective business must join with other institutions of society...in the future...[as] a requirement of civilized society" (p. 104). This statement finds a similar challenge by Carnoy (1997), Marshall and Tucker (1992) and Rifkin (1995). What with the demise of the corporations *Enron* and *WorldCom* in 2002 (The Washington Times, 2002; WorldCom Inc., 2002), and the consequent impact on Andersen Consulting as well as the shake-up of "high tech" stocks, Alexander's statement stands as a call for systemic reform in business. It is a call for business to become collaborative with their neighbors for other than profit as a means of success.

By the same token, however, change in business is also a matter of contestation. Take for instance a recent comment in *CIO Insight*, a journal aimed at Chief Information Officers of companies, about recreating the workplace to accommodate a much more "tech-savvy" generation. The article, by John Parkinson (2002), after challenging the reader to consider how children in the beginning of this millennium are able to carry on concurrent multiple computer tasks that would stymie their parents in the workforce, states:

By the time they enter the work force, we may have slowed them down to something closer to our level. Every generation tries to do this to its children to some extent, but no generation succeeds entirely; otherwise, we would never make any progress at all. I wonder how successful we will be in maintaining our current model of the workplace and the linear structure of work. (http://www.cioinsight.com/article2/0,3959,389112,00.asp)

It is one thing to enact change in some of the systemic elements, such as marketing methods or sales promotions, but the experience of paradigmatic change that influences the direction of a whole corporation is reportedly seldom if ever achieved. From Alexander's (1997) call for business reform and Parkinson's question about workplace readiness for a new generation, is it possible for business-education partnerships to be a bridge between socio-cultural change and workplace? Unless the difficulties still prevalent in partnerships are resolved, the potential good of partnering will be lost.

According to Carnoy (1997), in an OECD report, a number of changes have taken place in business and the workplace as a result of IT and that have found resistance (also Sassower, 1995). The report states:

The desegregation of work in the information age has ushered in the *network society*. The transformation has shaken the foundations of our institutions, inducing a whole new set of social crisis in the established system of relationships between work and society....It is our hypothesis that the crisis is due to the inability of social and economic institutions to adapt to the requirements/opportunities of the new, informational work pattern based on organizational flexibility and productivity growth through self-expanding human capital potential. This inability comes, on the one hand, from defensive resistance to change by workers, organizations, and institutions. It also results from short-sighted business strategies that use new technologies for immediate gains, trimming labor costs and imposing one-sided management decisions, regardless of their social cost (p. 18-19; italics in original).

Take for example Microsoft Corporation's responses to class-action lawsuits leveled against the company for allegedly overcharging for its software due to its "Windows monopoly" (*Financial Post*, 2002). The software corporation attempted to donate computers to needy places in education. The article explains:

Microsoft Corp.'s plan to settle class-action lawsuits by giving public schools in poor neighbourhoods US\$1-billion worth of computers was rejected by a U.S. judge who said it would help the No. 1 software company dominate the education Market...To put it bluntly, in the words of the opponents of the

proposed settlement, the donation of free software could be viewed as constituting "court-approved predatory pricing." (FP3)

The corporation saw their philanthropy as a "unique opportunity to achieve some very real social good" (FP3) according to a company spokesperson whereas opponents to the deal viewed it as opportunistic. One has to wonder had the donation been equal PC and Apple products a rebuttal likely would have been avoided; or if the company had simply donated one billion dollars to education and allowed the educators to decide on its use, there would have been a more positive response from the judge. In this case the focus had to do with profits and market share, pitted by the offended groups as an unfair advantage. What this situation shows is how misrepresented actions can be and how perceptions of actions vary depending on the vantage point. The matter of divergent perceptions is a critical one in the discussion of business-education partnerships.

Fritjof Capra (2002), known perhaps better for his forays into theoretical physics, also conducts management seminars around the world. According to a summary of his workshops, Capra has this to say about business and change:

Although we hear about many successful attempts to transform organizations, the overall track record is very poor. In recent surveys, CEOs reported again and again that their organizational change efforts did not yield the promised results. Instead of managing new organizations, they ended up managing the unwanted side effects of their efforts. At first glance, this situation seems paradoxical. When [we] observe our natural environment, we see continuous change, adaptation, and creativity; yet our business organizations seem to be incapable of dealing with change. (http://www.ciis.edu/pcc/caprawtc.html)

Business may show interest in "soul" matters, but its practices still raise questions about ethical conduct and their motives. This is not to say that business is the only

system to push the limits of ethical expectations placed on them either by society or from within their own culture.

The implication from this section is that business may suffer from a Janusnature that impedes change and functioning out of an ethos of conviction. This attitude is not at all conducive to education stakeholders who, already sharing perceptions of business as motivated by greed and profits, are divided about any positive benefits of the two systems partnering together.

On Education

Educational Purposes

Before discussing the nature or culture of education we need to examine its purposes or aims, or as Ebel (1972) was prompted to ask, "What are schools for?" (p. 3). Part of the difficulty of this discussion is the range of beliefs not only surrounding various articulated educational purposes but almost equally the stakeholders' reactions against political pressures and interpretations of educational purposes. The perceptions of educational purposes are really at the hub of the discussion about business-education partnerships. Ultimately partnership conflicts develop over divergent interpretations of, or emphases on, educational purposes. What is the role of education to be in society is a question that has been raised throughout the centuries. Hummel (1993), for instance, presents Aristotle's view of the purposes of education. He says: "For Aristotle the goal of education is identical with the goal of man...The happy man, the good man, is a virtuous man, but virtue is acquired precisely through education. Ethics and education merge one into the other" (p. 12). Hirst (1970), like White (1982), delves into the philosophical reasons for education while others have tackled ethical (Bruner, 1996; MacMillan, 1998; Strike & Soltis,

1992) and social (Bruner, 1996; Conference Board of Canada, 1997; Gibbons, 1990; OECD, 1997; Willinsky, 1998) reasons for education. What mechanism is in place—democratic or other—to ensure that education stays relevant to the needs of society and current in the world? The importance of understanding those purposes will have a direct impact on the discussion of education and the direction for businesseducation partnerships.

In UNESCO's *Information Kit for Education for All* (2001), the general rationale for education for the nations is stated as follows:

Education provides individuals with the power to reflect, make choices and enjoy a better life, stresses the Dakar Framework for Action. Education has powerful synergistic effects on other development objectives: empowerment, protection of the environment, better health and good governance. Education of mothers has a strong impact on health, family welfare and fertility.

According to a recent OECD report, investment in education results in a clear economic pay-off: one extra year of education leads to an increase in an individual's output per capita of between 4 and 7 per cent (in OECD countries).

Education is important for other reasons too, specially the cultivation of values, attitudes and conduct essential for living together in peace, and for personal growth and fulfilment. [sic] (The achievable goal; http://www.unesco.org/education/efa/ed for all/background/background k it contents.shtml)

Education, according to UNESCO (also Conference Board of Canada, 1995; OECD, 1997), is a multi-purposed system in societies with potentially great benefits to the people for personal, economic and social reasons. How best to achieve those benefits is a matter of determining the systemic purposes, form and structure of education.

Formalized education operates within the greater society, or within the "ethos of conviction," to borrow from Alexander (1997, p. 71), as the agency of learning

and acculturation. White (1982), who examines the topic of education from a philosophical approach, suggests that education has several grand purposes, some of which are pitted against each other, particularly where purposes are delineated along the line of instrumental versus intrinsic value. He also insists, "that education should not only be concerned with means to ends, but must do something to promote ends themselves," and that it "should aim at the *pupil's* engagement in (critical) activity for its own sake" (p. 15; italics in original). White also highlights one of the main purposes of his book is to "sort out what the *educator's* aims should be and that his aims may well be different from the pupil's" (p. 17; italics in original). Schweitzer, Crocker and Gilliss (1995) conclude a similar understanding in their comments about education in the context of the North America Free Trade Agreement (NAFTA), and which includes preparation for the workforce (p. 9, 17-18). Educational purposes, then, differ according to one's vantage point.

On a more global scale, a UNESCO report, *Education for All: An Achievable Vision* (n.d.), indicates broad, general education purposes and, from a conference in Dakar, Senegal, in the spring of 2000, presents 6 overarching education purposes to guide the nations entitled the "Dakar Framework:"

Expand early childhood care and education.

Free and compulsory education of good quality by 2015.

Promote the acquisition of life-skills by adolescents and youth.

Expand adult literacy by 50 per cent by 2015.

Eliminate gender disparities by 2005 and achieve gender equality in education by 2015.

Enhance educational quality.

(http://www.unesco.org/education/efa/global_co/policy_group/EFA_brochure.pdf)

These national purposes for education deliberately leave much to the imagination and interpretation by participating countries. The "life skills" in Canada, for example,

will look different and even be interpreted differently from those in the United States or Uganda. Nevertheless, these broad purposes are an example of how one organization views the purposes of education. Compare these with local concerns.

White (1982), in his dealing with the matter of educational purposes, raises a critical point in the discussion of those purposes. He argues: "If the good of society comes into the account, this seems to bring in political considerations: the question 'What should the aims of education be?' seems to become a political question, to be decided in a democracy, by the political community at large" (p. 22). Regarding society and its responsibility in the articulation and interpretation of education purposes, UNESCO (n.d.), in its online brochure on education, defines education as a social responsibility and a hallmark of the "civil society." The brochure reads:

Though the state has the ultimate responsibility for and authority over education, civil society organizations play a major role. Three distinct roles can be identified:

- *service providers* where state provision is absent or insufficient. Civil society organizations are more flexible than the state and closer to the grassroots and local cultures...
- *innovators* and sources of new thinking and practices -important if the EFA concept is to evolve and respond to change...
- *informed critics and advocates* on a whole range of development issues (http://www.unesco.org/education/efa/global_co/policy_group/EFA_brochu_re.pdf, italics in original).

Each of the above three roles implies sets of purposes of education. Who is responsible for the education of the population is itself a matter of debate and ranges from parental prerogative to societal responsibility.

As an example of broad purposes of education determined in a democratic context, in British Columbia the government's Ministry of Education list of

educational goals are: "Intellectual Development," "Human and Social Development" and, "To prepare students to attain their career and occupational objectives; to assist in the development of effective work habits and the flexibility to deal with changes in the workplace (Government of British Columbia, Ministry of Education, http://www.bced.gov.bc.ca/resourcedocs/k12educationplan/mission.htm). A Conference Board (2002) website report by Dave P. Newell, Chairman and CEO, Syncrude Canada, echoes a similar workforce utility in education purposes, which runs contrary, for example, to Dewey's view of educational purposes as going beyond work preparation and as an end in itself, and a preparation for democratic living (in White, 1982). Newell claims that, "one of the main benefits of an education to many people is not learning itself, but the employability it leads to. An education—almost any higher-level education—used to be a ticket to the front of the employment line. Today, it's a requirement just to get into the line."

Associations representing educators have also added to the list of education purposes. In a Press Release by the Canadian Teachers Federation (CTF; 1997), a segment proclaims: "A Message From Canada's Teachers," in which the implicit goals of education in Canada also include systemic support for "a stable and well-funded system of public education, professional teachers, and classroom conditions which ensure that every child has the opportunity to learn." Furthermore in its Annual Report from a meeting in Prince Edward Island (2000), the CTF effectively agreed to several other educational goals, from anti-privatization, to education as a non-commodity and protection of students from being "a captive consumer audience for any corporation" (p. 10). And in an effort perhaps to ensure proper articulation and understanding of the purposes of education in Canada, the CTF states: "The goals

and expectations society sets for learners and schools must be both challenging and realistic, and progress towards these goals must be evaluated in a comprehensive and fair manner" (p. 29). What is evident from the various reports above, and which corresponds to White's (1982) earlier comment, education has two philosophical, and not unrelated, strands: intrinsic and extrinsic worth. Some stakeholders emphasize the one over the other, which leads to conflicting values between business (or other systems) and education, for example. How easy, too, for business and society to argue that business-education partnerships would be the best means of ensuring "a stable and well-funded system of public education" (CTF, 1997). If in the end business-education partnerships are determined by a community to be the right way to go, who is to argue against this? But this is only part of the problem of sorting educational purposes.

Lam (1990), citing a 1972 Alberta government document (the Worth Report) regarding education's role as an acculturation agent noted, "the Commission report emphasized the leading part the educational system can play for bringing about significant changes in society instead of just reinforcing existing dominant values and beliefs" (p. 104). Lam points out a salvific purpose of education towards society. Of course in order to effect social change more purposes will need to be considered, such as the goals of society or of communities and of organizations in these communities. Yet, Hull (1997), citing an earlier work by Giroux and McLaren in 1989, suggests that, "the conservative discourse of schooling" (p. xiv), wherein public schools are defined as "agents of social discipline and economic regulation" (p. xv), are "valued only insofar as they turn out workers with the skills, knowledge, habits, and attitudes thought essential in terms of today's economy" (p. 5). This, according to

Hull, places unnecessary restrictions on students in that students are confronted with diverse social pressures through schooling that detract from more relevant purposes, such as critical thinking or analysis.

It should be becoming obvious that the various social organizations in society have diverse perceptions of education and its purposes. One apparent purpose of education is to teach children to learn information and skills for the test (Gibbons, 1990). Depending on one's philosophical leanings, educational intent is seen to acculturate status quo or to legitimate inequality and maintain the dominant culture's values (Giroux, 1983),²¹ or to emphasize particular selections and omissions in a culture (Billington, Strawbridge, Greensides & Fitzsimmons, 1991). According to Pai and Adler (1997), the purposes of education could be viewed as the "deliberate means by which each society attempts to transmit and perpetuate its notion of the good life, which is derived from the society's fundamental beliefs concerning the nature of the world, knowledge, and values" (p. 4).

However, another compounding problem in the articulation of education purposes is anthropologist Jules Henry's claim that: "School metamorphoses the child, giving it [sic] a Self the school can manage, and then proceeds to minister to the Self it has made" (cited in Contenta, 1993, p. 28). Part of the acculturation of young people is seen as recreating individuals in the image of a state ideal. Henry's comment sounds similar to Parkinson's (2002) article about the workplace and its accommodation of a generation of "tech-savvy" children where he states: "After all,

²¹ Agger (1992), and Blackledege and Hunt (1985) speak of education in terms of conflict or Marxist theories; Mifflen and Mifflen (1982), and J. H. Turner and Maryanski (1979) view education as a social function, or of a utilitarian value to society; and Agron (1993), Hathaway (1991) and Toll (1991) in different ways examine the role of architecture in education.

the education we give our children, particularly in high school and beyond, seeks in part to renormalize their behavior into a model that we (and their teachers) are more comfortable with" (http://www.cioinsight.com/article2/0,3959,389112,00.asp).

According to Contenta, schooling is the practice of the hidden curriculum, which essentially is a curriculum of "submission." Students are constrained by it as much as they are trained in it. It is the enforcement of the *status quo*, dominant society's ideals, even if these are in contradiction (p. 179; also Butler & Walter, 1991). White (1982) raises the problem of set curricula and materials as well as the systemic form and structure of schools. He asks: "Why have educated men [sic] all got to be of the same type, all with identical qualities?" (p. 125). Regarding these "materials" Lorimer and Keeney (1989) raise questions about the role of textbooks in the development of the curriculum, pointing out that textbooks help to ensure the very problem that White questions. Education purposes so far are evidently sufficiently varied as to render the discussion of education and especially business-education partnerships very complex.

Bruner (1996) views education as "a major embodiment of a culture's way of life, not just preparation for it" (p. 13). A similar point is critiqued, along with the role of education in the context of social change, by Postman (1996). In a study of Canadian schools and their culture, Contenta (1993) says this about how and what educational purposes are achieved:

While the home environment is a factor in reproducing inequality, schools themselves are working hard to teach children at the bottom how to stay there while teaching those at the top how to hang on to what their parents already have. The process is skewed by a cultural bias that permeates schooling—from teachers to textbooks—and it is legitimized by the myth of meritocracy. Invisibly they combine to shape the self-image of young people, a message with the soul that spares no one, including the middle class. (p. 96)

As a challenge to the education establishment and reminiscent of Gibbons (1990), Bruner wonders:

If...school is an entry into culture and not just a preparation for it, then we must constantly reassess what school does to the young student's conception of his own powers (his sense of agency) and his sensed chances of being able to cope with the world both in school and after (his self-esteem). In many democratic cultures, I think, we have become so preoccupied with the more formal criteria of "performance" and with the bureaucratic demands of education as an institution that we have neglected this personal side of education. (p. 39)

He even suggests that "learning in its full complexity involves the creation and negotiation of meaning in a larger culture, and the teacher is the vicar of the culture at large" (p. 84). Whether or not teachers are conscious of this role as "vicar" is a matter for further research. Eisner (1983) comments:

Attention to the sensibilities in schooling has always been a low priority. The senses are supposedly bodily functions, somehow unconnected to the mind. Feeling, or awareness of qualities, is supposed to rely upon soma, and educational experience is supposed to deal with psyche. The break between mind and body is further legitimated by the reification of cognition and affect. We tend to regard the former as linguistically mediated thought—kind of inner thought—and the latter as feelings that need no help from mind or intelligence. (p. 53)

These acculturation expectations and "personal side" draw attention to the purposes of education as a reminder that ultimately those purposes directly affect (young) people, and that determining what these educational purposes are to be along with their effects invites a continuous reexamination. We can see how these critical approaches to education's purposes, such as connecting mind and body, might conceivably, if unexpectedly, be aided or threatened by partnerships that move education out of its own self-contained realm and into a larger world, albeit represented by business. What is important here is to see how perceptions of the

basic purposes of education, from both sides, can be at issue. The solution is not to try to develop purposeful ideals or mutually acceptable educational purposes.

Related educational perceptions are drawn out by other writers, such as Gibbons (1990) who states that there are, among others, three "tendencies in schooling[:]...the tendency to cultivate failure, isolation and confusion. In the traditional paradigm all learning leads to the test and its proven success in it...While tests create pressure to learn, they primarily serve the needs of management and create serious downside risk for the learning of many students" (p. 147). What we see from Bruner (1996), Eisner (1983) and Gibbons is that although educational purposes may be established by legislation and endorsed by educators, their articulation in practice leads to different ends. Part of the solution to the problem of divergent perceptions of educational purposes is to examine the systemic factors of education. Only in this way can educational purposes be effectively guarded against misperceptions and conflicts of interest.

Another difficulty in the systemic structure of education is the view that society has changed and that these social changes have an impact on education (see W. T. Anderson, 1990; Bibby, 1990). Postman (1996) speaks about some of these social changes and education, stating: "The idea of a 'public school' is irrelevant in the absence of the idea of a public; that is, Americans are now so different from each other, have so many diverse points of view, and such special group grievances that there can be no common vision or unifying principles" (p. 196).²² The system of

²² The Internet is already influencing the system of education. A number of universities already offer on-line degree programs (e.g., Athabasca University, MBA program). Some schools also offer virtual classes. A friend of mine is a *virtual* teacher. His is a classroom without walls but comprised of his

education is structured to accommodate a predefined pattern of pedagogy by architecture, legislation and practice. Contenta (1993), for instance, points out: "Schools came to reflect the hierarchical nature of workplaces and were built, organized, and run like factories...They were so similar in structure to factories that some, like Toronto's Brant Street Public School [in Canada], were actually made to be converted to factories if enrolment declined" (p. 16). That is, the prototype of schools is factoryesque in its design and existential function. It seems dubious, then, that schools could be called upon as instruments of positive social change (see Kohl, 1980).

The variety of purposes of education, whether perceived or articulated, invites misunderstanding as the system of education clashes with others over differing expectations of what the *outcomes* or purposes of education are or ought to be. As a perceptive summation of what I have presented so far, Pai and Adler (1997), in their work on educational culture, comment on some of the critical problems of the purposes of education. They say:

The meanings of these ideas [on the foundations of education] and their influence on human behaviors, thinking processes, and learning styles vary according to society's prevailing worldview and values. This being the case, it is not surprising that each society has its own conceptions of what *liberal education*, *well-rounded person*, and even *basic skills* mean. Moreover, the relative worth of special goals and educative means is rooted in the social, cultural, political, and economic contexts in which people learn and educational institutions function. (p. 3; italics in original)

laptop computer and a large number of students who inhabit other spaces: a dancer in Monaco, sports students unable to attend school with regularity, students at home because of health or disciplinary reasons. Gord can take his "class" with him wherever he goes. When I first met him in Mazatlán, Mexico, he would disappear for about two hours each day to electronically communicate with his students. A bonus of this means of education, according to Gord, was that parents were much more attuned to what their children were doing, being able to communicate more readily (at their convenience) with him.

Clarifying the purposes of education is more than deliberate and official statements. Whose need is being represented? From Pai and Adler as well as Postman (1992, 1996), what should we do when "visions of a better, more democratic and egalitarian world" (Ornstein, 1995) are contrary to the feelings and beliefs of others, or what if the visions are myopic? Whose "oughts" and "shoulds" deserve privileging and why? These questions and the research of their answers are part of the philosophy of education, another element in the systemic factors of education. What Pai and Adler have raised is how the problem of establishing education purposes is rendered more complex through people's perceptions of them, and how they are achieved or pursued in the social ethos and practices of the educators. The diversity of perceptions, which can so easily lead to problems, demands that businesseducation be scrutinized systemically, which is the foundation of this dissertation. In this way the diversity of perceptions can be mapped and the systems of business and education can receive a complete review so that the discussion of business-education partnerships may proceed with greater detail in order to alleviate problems and ensure successful decisions.

Transition From School

Another important point in the discussion of educational purposes, especially in relation to the potential for partnerships, has to do with the transition from school to life outside school. Gibbons (1976) fathoms another compounding factor in the complexity of the system of education. He states: "The crucial issue of secondary education, and perhaps of all education, is how to promote the successful transition of youth from childhood and school to adulthood and the community" (p. 1). Darrah (1997), in his discussion of the transition from school to the workplace, questions the

curriculum that education has or has been provided to help students in this transition from school. He challenges researchers who intimate that,

efforts to facilitate the school-to-work transition by young people necessarily rest upon assumptions about the nature of work that may be unexamined and even spurious...analyses of work which decompose people or jobs into components that are presumed to be necessary in order to perform the work...[and the outcome is that the] content of jobs is typically treated as if it varies independently of the characteristics of workers, thereby creating the constraints to which new workers must adapt. The function of education thus becomes narrowly defined as one of providing people with the skills required by the jobs. (p. 251)

Assumptions in this case about the transition from school to work demonstrate the linear and reductionistic thinking mode of education and of some education commentators.

Marshall and Tucker (1992) suggest that a viable solution to the problem of school-to-work transition would be a combination and variation of approaches practiced abroad. Marshall and Tucker demand: "We must devise a structure for the school-based portion of the vocational education system that is based, as in Sweden, on a modular curriculum and broad occupational categories, rather than on narrow specialization. Schooling must educate as well as train, and provide the broadest possible foundation for worker mobility and choice" (p. 211). Their suggestion, however, fails to take into consideration the complexity of that transition (Eggleston, 1992), and also brings the discussion on transition back to educational purposes. Marshall and Tucker also implicate higher education for being responsible in part "for the problem in the schools." In fact their conclusion is, "though higher education is in a better position to provide active assistance to the schools than most of society's basic institutions, it has thus far failed to do so" (p. 212).

Concerning these institutions of higher learning, Contenta (1993) charges:

The universities are perhaps the biggest stumbling block to ridding schools of academic disciplines. They remain the fortress of bureaucratic expertise in which academics jealously guard their turf—historians keep anthropologists at a distance and psychologists make sure no one mistakes them for sociologists. They pressure high schools to reflect this view of the world and, indeed, universities must shoulder the blame for much of the structured inertia of schools. (p. 202)

Education is obviously affected at all levels by the demands of higher education. Whether or not universities are responsible for as much as Contenta or Marshall and Tucker (1992) claim is another study. My point here is to emphasize that there is another influence in secondary education to consider, in addition to its relation to the world of business and work. Again, these points regarding transition from school to the workplace demonstrate a range of opinions and observations of practices, which demand an examination of both the systemic factors of education and the corresponding perceptions of them. I will raise this topic of transition again below under the heading of business-education partnerships.

Teachers and Teaching

The systemic factors in the purposes of education also take into consideration the persons who will benefit from the purposes and who will be the implementers of those purposes. In this case society's agents (Bruner's "vicars") of education—teachers—command some attention in the discussion of education. After all, teachers are the frontline interpreters of educational purposes. This immediately pits educators

²³ On a note about higher education and the problem of funding, Noll (1998) reminds us, "controversy has been sparked by concerns that academic research has grown too close to industry in areas such as biotechnology. Critics fear that deepening commercial ties in such areas may be undermining academe's commitment to both basic research as well as the academic norm of free disclosure—a norm that contributes to research quality and to the cumulative advance of science and engineering more generally" (p. 171). He also indicates that: "The impetus behind increased industry support for university research comes primarily from universities, not industry" (p. 183). Part of the reason he offers for this is the desire of researchers to increase revenues due to decreases in funding (p. 184).

against other members of society who may have different views about what those educational purposes ought to be and how they should be attained. The consequent conflict from these differences needs to be addressed on a systemic level, for the problem and solution are not about fixing teachers or their perceptions.

But the complexity of education is also compounded by the complexity of school cultures, which add to the difficulty of effecting change in education (see Sarason, 1982; Sergiovanni, 1987). Wyner (1991), in his work on education, defines the nature of teaching as a school-determined ethos, that "teachers have their own workplace beliefs, values, traditions, and relationships that constitute the culture of teaching. Teachers' beliefs about what goes on—'the script' on social interactions or subject matter—are a significant source of collegiality or conflict in teaching cultures" (p. 95; also T. Atkinson, 1996; Bey & Holmes, 1990; Cochran-Smith & Paris, 1995; Craiq, 1995). Teacher preparation programs experience multiple challenges, such as diverse philosophies of methods (Britzman, 1988; Brook, 1996; Brzoska, Jones, Mahaffy, Miller & Mychals, 1987; Corrigan & Haberman, 1990; Elliott, 1993; Griffin, 1995; Hargraves, 1995; John, 1996; Levin, 1990; Liston & Zeichner, 1991; Proefriedt, 1975; Soder & Sirotnik, 1990), reforming teacher preparation programs (Book, 1996; Borman, 1990; Braun, 1989; Britzman, 1991; Claxton, 1996; Gallup, 1995; Goodson, 1995a; Kramer, 1991; Lang, McBeath & Hébert, 1995; Tom & Valli, 1995; Tyson, 1994), and the pre-service teachers' perceptions and knowledge of education (Aitken & Mildon, 1991; Butt, 1989; Gauthier, Mellouki & Tardif, 1993; Woods, 1984). Osquthorpe, Harris, Harris, and Black (1995) offer a challenge to education and even to society: "Today's teachers must be equipped with an array of thinking and

problem-solving skills greater than those of any past generation of teachers" (p. 58; also Goodlad, 1990). Whitehorse (1996) suggests:

Teachers' theories about and behaviours regarding teaching in multicultural contexts are based on personal and educational experiences, and that these experiences are framed by the socio-cultural context of the school, community, and student attributes. More importantly, they are significantly affected by the socio-cultural contexts from which students and teachers come (and in which educationally institutions exist). (p. 326)

Regarding the socio-cultural milieu of schools, Pai and Adler (1997) state that students are "members of cultures to which the teacher may not belong" (p. 16; also Becher, 1992; Wright, 1987). Evans and Brueckner (1992) note that teachers have "varied personalities, philosophies of teaching, ideas, attitudes, and perspectives" (p. 88). Wubbels and Levy (1993) report findings on the perceptions of teachers—by themselves, by their students, and by the researcher—and note a divergence of opinions. Kelchtermans and Vandenberghe (1996) state that teachers' professional behavior is linked directly to the view they have of themselves, and their perceptions of tasks are "[implicitly] normative and connected to self-esteem" (p. 55; also Clandinin, 1986; Cuban, 1982; Woods, 1984). This introduces an additional challenge in the delivery of the curriculum as well as in the interaction in the classroom. Pai and Adler note, in reference to the culture of education, that, "teachers as a group are monocultural in their experience and education. Only when individuals increase the repertoires of their private and operating cultures and make use of them can they function proficiently in culturally divergent situations" (p. 118).

Adding to this teachers' ethos, A. Hargreaves (1993) believes that teachers are isolationistic and individualistic due to the systemic nature of schooling with its independent classrooms and one teacher per group of students, where there is little

recourse to professional dialogue between fellow teachers, in a system that does not foster ongoing professional growth (also Marshall & Tucker, 1992). Regarding the practice of teaching, A. Hargreaves comments:

The continuing and pervasive presence of isolation, individualism, and privatism within the culture of teaching is not a matter of serious doubt or disagreement among writers on the subject...Although pockets of collaborative and collegial practice among teachers are acknowledged, these are widely understood to be exceptions to the general rule, requiring special conditions for development and persistence...Despite numerous efforts at improvement and reform, individualism stubbornly prevails within the teacher culture...Why? (p. 54)

This may well speak to another of the hurdles—around communication among professionals—that faces the forming of business-education partnerships and fuels the fires of misperceptions.

The role of teachers is also problematic in trying to define precisely what it is. Eggleston (1992) and Welker (1992) refer to teachers as professionals while Simmons and Pitman (1994) define them as "workers," a reference similar to Marshall and Tucker's (1992) "blue-collar" view. McLean (1991) describes the teacher as an "agent who actively mediates between environment and action, who discriminates environmental features in making decisions about personal actions" (p. 6), but also who is *resistant to change* (p. 223, emphasis added). On a more political bent, Giroux (1995) argues for the teacher as "public intellectual" whose role as critical social agent necessitates being a cultural worker deliberately struggling against oppression as a social evil and one that students, and presumably pre-service teachers, must engage (also Abraham, 1984; Lesourne, 1988; McEwen, 1995; McIntyre & O'Hair, 1996; McLean, 1991; Postic, 1989; Simon, 1992). Even gender plays a part in teachers' roles. In a study on gender differences in teachers' career patterns MacLean

(1992) found that: "Many women...adopt a collegial model of *power sharing* rather than a hierarchical and bureaucratic model of *personal power*, the latter being the approach adopted by many career oriented men" (p. 18, italics in original).

Researchers view teaching as craft (e.g., Huberman, 1993; Pratte & Rury, 1991), as labor (e.g., Apple, 1991; Marshall & Tucker, 1992), and as artistic endeavor (e.g., Eisner, 1974; Gage, 1978).

Compounding the problem of teacher roles, Simon (1992) raises the following critical questions germane to teachers and their practice:

To suggest that education is a moral and political enterprise raises at least two central questions that must enter into deliberations as to how one should formulate one's responsibilities as a teacher. The first is what the moral basis of one's practice should be...What are the desired versions of a future human community implied in the pedagogy in which one is implicated? The second is, given our own moral commitments, how should we relate to other people who also have a stake and a claim in articulating future communal possibilities? (p. 15)

Simon's questions tie in with what I showed earlier regarding the purposes of education (White, 1982). Interactions between education and community are by nature ethical, and one promise of such partnerships would be in creating a space to explore those moral commitments within communities. Simon's questions relate back to my earlier discussion about educational purposes and versions of reality that should have ascendance. Posner (1996) addresses teachers with the philosophical questions: "How do you view knowledge in your subject matter? Do you think of learning your subject matter as absorbing ideas (idealism), mastering facts and information (realism), training the intellect (neo-Thomism), problem solving (experimentalism), or finding the self (existentialism)" (p. 58)? Thus, Simon's first question above is a crucial one in the consideration of education. As one ponders

the "desired versions," or version of education, the question of accountability necessarily arises. That is, what with the multiplicity of cultural views, whether philosophical or selective tolerance of difference, or postmodernists' skeptical stance towards history, authority and truth claims, or metanarratives, how does one confidently begin to implement a legitimate "version of a future human community"? Do we discard "legitimate"? And, concerning how we should "relate to other people," who is to say and to what end? Here then is a promising agenda in the initiation of a partnership for schools to explore as a learning experience and for businesses to retain their ethical sense in an era that has tested that sensibility.

Related to teacher isolationism, Welker (1992) found that "teachers were surprisingly confident and strong about their opinions on teaching, [but] they rarely if ever turned to evidence beyond personal experience to justify their professional preferences" (p. 89). Contenta's (1993) perspective provides one possible explanation for this. He says:

The school system desperately needs better teachers, but even the most able have difficulty sustaining their commitment. Like their students, they too are victims of a system where hierarchy reigns and rocking the boat is not tolerated...They seem forever shadowed by a mind-numbing awareness of how immensely complex the problems with schools are and, feeling powerless in the face of the hidden curriculum, resignation is their lot. (p. 27)

Marshall and Tucker (1992) explain a similar perception of educators as follows:

In a Taylorist system like the public schools, it makes very little sense to invest heavily in the recruitment, selection, and training of front-line staff—in this case teachers. After all, they are interchangeable parts, not to be relied on for independent judgment, there to do as they are told. Teacher compensation systems are very revealing in that respect. After teachers reach about twelve years of service, they typically get only cost-of-living raises...This is hardly the view one would take if one valued the professional competence of teachers as we value the professional competence of lawyers, architects, or accountants. It is the way we view counter workers in a fast-food restaurant. (p. 116f)

Marshall and Tucker's depiction of one aspect of the systemic structure and purposes of education provides a harsh challenge to the idea of teacher professionalism. Their accurate portrayal of the pay scale of teachers, which is but one systemic element of education, is an indicator of the low value that society ascribes to educators. This is not surprising, the authors are saying, given that the system of education is structured after Taylorist principles.²⁴

Education is a distinct culture comprised of such systemic factors as conduct, assumptions, practice, personnel and management, and so on. Lowe's (1997) work on the culture of education informs us that "schoolteaching [sic], never seen as more than a marginal profession," leaves teachers in an identity quandary (p. 150). According to Marshall and Tucker teachers are blue-collar workers whereas business is a white-collar culture; educators are in the "business" of teaching adolescents and children whereas business is occupied with survival and profit. According to Gayton (1989): "It is important for education managers to be aware that each community and school district has its own culture and to adjust to these difference [sic]" (p. 18). Pai and Adler (1997) clarify that, "each district or school has its own 'lingo,' rules concerning the conduct of its members, and such unique 'rites of passage' as initiation, induction, and commencement ceremonies...What this means is that a person moving from one system to another needs to learn a new culture if she is to function effectively" (p. 141). Erickson (1991), in a somewhat contentious work on school culture, asks: "Why bother with the notion of culture when thinking about

²⁴ I speak more on Frederick Taylor's influence in education in the next section.

schools?" His answer, however, runs counter to findings by other researchers, such as Contenta (1993), Cuban (1984) or D. Hargreaves (1995).

Regarding how the culture of education is borne out in practice Bacharach and Shedd (1989), and which I discussed earlier regarding teachers' roles, comment:

Time schedules, physical structures, one-teacher-per-class staffing patterns and high teacher/administrator ratios make day-to-day contact with other adults haphazard...Norms of "non-interference" discourage the asking and offering of advice...Curriculum policies, [including efforts to reform education] if they do not square with a teacher's judgment of what his or her students need or are capable of learning, often go unobserved and unenforced. (p. 146)

They insist that in practice, education continues to foster a spirit of non-collaborative, judgemental and hierarchical structures that prevent trust, wider spread respect among community members. Low pay, high stress, and lack of inclusion by management or government reinforce "a hierarchical teacher-pupil relationship" (p. 261), which is also perpetuated in institutions of higher learning (Contenta, 1993).

In a comparison between education and major corporations, Marshall and Tucker (1992) suggest that in education, "very little is invested," and that "we can reasonably conclude that teachers are not regarded as the key to the success of schools, all the rhetoric to the contrary notwithstanding—management is" (p. 117). Bacharach and Shedd (1989) conclude that, "the top-down management techniques that were sources of efficiency in an earlier era have grown increasingly inefficient in today's more specialized, varied and variable product markets" (p. 151), a point that is corroborated by Alexander (1997) and Eurich (1985) in their works. Bacharach and Shedd point out another cultural characteristic of education that actually finds convergence in business:

Studies of innovation in school systems generated conclusions that were even more at odds with traditional management models. Schools that were

particularly innovative were found to have 'norms of collegiality' and 'norms of continuous improvement' that minimize status differences between administrators and teachers, engage all staff members in planning new programs, and cultivate an on-going critical dialogue on how school programs and every individual's performance might be improved. (p. 149)

Bosetti, Landry, and Miklos (1989) critique what is called the dominant rationalist model of administration, particularly that this model "emphasizes regulation and power rather than choice in public administration."

The importance of the role of administration in the success, or failure, of an innovation is borne out in practice according to Brady (1985) and developed further with the inclusion of higher education in Clift, Veal, Holland, Johnson and McCarthy (1995), and is another factor to consider in education. Miller and Seller (1990) note:

Although the teacher is the actual implementor of a new program, the roles of the principal...and superintendent as support to teachers are equally important...Implementation success can depend a great deal on the overt signs of support for the new program given by principals and superintendents, for example, budgetary actions, comments made in public, and personal interest shown in the progress of the implementation. Principals who frequently discuss the implementation with their staff meetings, who personally talk with individual teachers about the new program and assist them in solving problems show a greater success in implementation in their schools than principals who do not engage in these activities. (p. 283)

Given the systemic structure and nature of education, the successful articulation of its purposes and the sustainability of new programs are greatly influenced, either positively or negatively, by the intervention of management.

Other systemic factors need to be in place at the same time, however, for successful programs to be achieved. Marshall and Tucker (1992) contend:

Loyalty to the system, not contribution to student performance, is thus the primary criterion for success in the schools. That is why new methods of proven effectiveness are so often ignored. If implementing the innovation is likely to arouse the wrath of anyone inside or outside the system, it is quietly shelved, along with the person who promoted it. The system's primary obligation is not to its students, but to itself. (p. 110)

That is, education may have wonderfully articulated purposes, but its primary objective is the preservation of its *status quo* (Cuban, 1984; Gibbons, 1990).

Contenta (1993), speaking about the structure of education, claims: "Nothing enforces routines like hierarchy with its rigid, lockstep lines of command designed to keep people in their allotted places...Individual schools have principals, department heads, and classroom teachers supervising students. Factories have superintendents, department heads, supervisors running the plant and overseeing workers" (p. 16). With the earlier discussion of educational purposes in mind, the descriptions of the culture of education leave serious concerns about the discrepancy between purposes and practice. These additional systemic factors of structure and governance need to be taken into account as business and education consider partnering. Education itself is a paradoxical institution of learning but that also suffers from old practices of questionable relevance or that are seriously deficient. Education is a system whose complexity is compounded by contradictions and is in need of uncovering the perceptions of itself.

Randall (1989) notes that at a particular Conference Board conference dealing with education, "several of our members concluded that the problems in public education were so great that the only solution was to blow up the system and start over. At our wrap-up session, those same individuals also quickly realized that we would not know how to put the system back together" (p. 48). This is a significant admission both of the complexity of education and of the specialization that it may require as well as the lack of alternatives.

The longevity of education is ensured by government mandate and by public funding, which in turn ensures protection from the world, at least to the degree that

regardless, or in spite, of the economy, schooling will continue. Hodas (1996), in his critique of education in the light of technological change, was inspired to write:

Even the most complacent bureaucracies direct some incentives at their workers. These may be monetary, in the form of performance bonuses or stock options, career enhancing in the form of promotions, or sanctions like demotion and the consequent loss of authority and responsibility. Schools generally offer none of these. Instead they proffer to good and bad alike a level of job security that would be the envy of a Japanese sarariman:²⁵ unless you commit a felony or espouse views unpopular in your community you are essentially quaranteed employment for as long as you like, no matter what the quality of your work. Teachers cannot be demoted: there is no position of lesser authority or responsibility within schools. Just as students are essentially rewarded with promotion for filling seats and not causing trouble, so teachers are paid and promoted on the basis of seniority and credentials rather than performance. Providing they have not violated some school norm it is not uncommon for teachers or administrators who demonstrate incompetence at their assigned tasks to be transferred, or even promoted to off-line positions of higher authority rather than being fired, demoted or retrained. Perversely, the only path to formally recognized increase in status for dedicated, talented teachers is to stop teaching, to change jobs and become administrators or consultants. (p. 201)

Hodas' stinging sentiment above could be easily disregarded as overstated cynicism were it not for corroborating comments from other researchers, such as Contenta (1993) in his case studies of several Canadian schools, or Cuban's (1984) historical picture of education as a paradigm of little change, and Lowe's (1997) similar findings in a study of schooling since the 1960s. The point is not that educators have different values than business people, which is evident. The point is educators face different systemic factors compared to business that interfere with their identity, their practices, their easy comparison with other workplace workers, and their self-perception as professionals. For business-education partnerships—and for systems

²⁵ Literally, "salary man." The sarariman is the committed and loyal worker who received job security plus numerous benefits.

interested in collaborating in some way with education—this information provides another backdrop against which such interactions take place.

Due to the many variables in the educational culture and process, such as "student background and learning style," methods, or curriculum (see Cornbleth, 1990; Doll, 1993; Goodlad, 1986; Goodson, 1995b; Hunter & Scheirer, 1988; Miller & Seller, 1990; Ornstein & Hunkins, 1993), Marshall and Tucker (1992) contend:

Teachers and principals cannot be held accountable for student performance outcomes for two reasons: they have never been clearly specified, and in any case, they are responsible not for student performance outcomes but for following the rules laid out in the design standards. If following the rules does not produce the desired result, that is somebody else's problem, not theirs...Design standards and Tayloristic organizations go together like pieces of a puzzle. (p. 145)

This cultural drama that the authors unfold speaks of the structural composition of education.

Eurich (1985) and Marshall and Tucker (1992) note that current education's beginning is directly related to the Industrial Revolution along with Franklin Bobbitt's adaptation of Frederick Taylor's scientific approach to business. It was then that school buildings began to be erected to house large numbers of young people; a practice that not only continues today but that has been perfected as examples of economic decision making (Hathaway, 1991). How is business or any community organization to work with education to any positive end if education is an institution with little hope of changing and resistant to reform? What hope is there that any business-education partnerships could possibly be positive, mutually benefiting arrangements? These are just a sample of questions that need to be considered prior to business and education partnering together.

Taylor's Legacy

Frederick Taylor's work in business had an influence on education as well through the application by well-meaning and influential individuals in education. It was Franklin Bobbitt, an educator at the turn of the 19th century, who translated Frederick Taylor's principles of scientific management into a form to be employed in education. Marshall and Tucker (1992) report:

[Bobbitt] "believed with Taylor that efficiency depended on 'centralization of authority and definite direction by the supervisors of all processes performed...The worker [that is the teacher]...must be kept supplied with the detailed instructions as to the work to be done, the standards to be reached, the methods to be employed, and the appliances to be used...." Thus were the principles of scientific management used to elevate the authority of the supervisors and limit the freedom of the teacher. (cited p. 17)

Marshall and Tucker state that in a Taylorist-based organization, "learning flows in only one direction—from the top of the organization to the bottom. Indeed, the adversarial relationships in a Taylorist organization actually impede the flow of information in any direction...[whereas] in the learning organization, information flows freely in all directions" (p. 101). Jones (1992) stresses the importance of management to shed the hierarchical approach to management for a collegial and collaborative venture, which includes the willingness to participate in the learning process and which excludes static control. Hull (1997) believes that a result of the effects of Taylorism is that "we still harbor suspicions, even when choosing to introduce new forms of organization, that our workers won't adapt to or thrive in these new work environments" (p. 14). Although these concerns by Jones and Hull could be addressed there still would be problems in education, because other systemic factors weighing in on the system of education have been left. In at least one way business and education could have a similar point of comparison. The

Tayloristic influence continues today in business as well as in education where it may even have a greater hold.

Education and the Economy

In a report by the Canadian Chamber of Commerce (1990) a guest editorialist states:

It was becoming clear to business that the future survival of their businesses and industries may well depend not only on what is happening in the board room, but also upon what is happening in the classroom...As a consequence, business leaders are finding it necessary to become more interested, involved and committed to the importance of education in secondary schools. (p. 1)

In a related article, Carnoy (1997) notes that, "youth with secondary education are increasingly at risk in the labor market, in large part because both the education system and employers regard them as inadequately prepared for higher-skilled, flexible jobs" (p. 37). This "risk" factor is one that has been raised by other concerned writers who argue the immediate connection between the economy and education (e.g., Jarvis, 1988). The implication for education, beyond the suggested superiority of business in the management of education, is that it is not meeting the needs of the changing workplace by adequately preparing young adults.

One of the strongest points used to argue for business-education partnerships is the sate of the economy. Carnoy (1997) claims that the socio-cultural structure, or its cultural system, is directly linked to work culture (p. 24). Jones (1992), commenting on the important role that government has in the educational process, indicates there is a correlation between a country's economic well-being and the training of its people (p. 182; also Schweitzer, Crocker & Gilliss, 1995, p. 8), a point made earlier in the discussion on educational purposes. Also, some research findings indicate there is a connection between literacy, education and a nation's economic

well-being (Carnoy, 1997: 24; Hull, 1997). Part of these findings claim that if graduates and school-leavers are unable to secure and maintain long-term employment due to deficient preparations, then the nation loses "the buying power of a significant segment of the population" (Hull, p. 9). But Hull cautions that there are "key societal problems" and "larger ills" that need to be considered that affect the achievement of educational goals (p.11; see also Mikeram, 1966; Steele, 1992). She goes on to counter the literacy and economy connection by pointing to historical progress and high successes in commerce during times when literacy, for instance, was not at a high level, as if "school degrees and literacy tests are the measures of our workers" (cited p. 15). Nevertheless, on the basis of the changes that IT has brought to the workplace and according to the Education Committee of the Canadian Chamber of Commerce (1994), education equates with training for work "in order to compete successfully in an emerging knowledge-based economy" (p. v). In a Sacramento Business Journal (1997) article about the education system in California, one businessperson claimed: "The relationship between the economy and public schools is not one-way. A strong education system supports the economy" (p. 169). Elsewhere the Education Committee of the Canadian Chamber of Commerce states that, "all Canadians must recognize the connection between jobs and learning—and understand that the critical competitive advantage for individuals, corporations and countries as a whole, lies in the advancement of knowledge and skills" (p. 3). The same Education Committee argues also that because the nature of the economic advantage is a national issue, provincialism is transcended. Hence,

"lifelong learning" as a cultural commitment is prescribed along with "international benchmarks for excellence" (p. 5). 26

Clendenin (1989) claims: "Our collective fate is bound up with their [students] individual fates, and it is in [society's] interest for them to succeed. Under the current system, many of them will not" (p. 10). Darr (1989) suggests, "the only way to address youth unemployment in the long run [is] through improved education" (p. 37). And the University of Warwick's Centre for Education and Industry (1995) states in one of its online research documents:

If education and training systems are to tackle these problems [of unemployment and preparation of people for the workforce], they must be based not on the transmission of existing knowledge and skills but on an understanding of the learning needed to underpin the future needs of our society and its industrial and economic base. Instead of a system which perpetuates unfounded assumptions about people's capacities to learn and embodies arbitrary distinctions between, for example, 'academic' and 'vocational' education, what is needed is an approach which motivates individuals and encourages and supports learning at all stages of their lives....Key to the achievement of this will be the development of a mass participation system of post-compulsory education and training, embodying a much greater diversity of approaches in order to match the increasingly varied needs of the learners involved. Young people in particular will need at this stage not just to acquire existing skills, knowledge and techniques but to learn how to apply them creatively and in new contexts, and to be motivated to carry on learning as necessary throughout their lives.

(http://www.warwick.ac.uk/fac/cross-fac/cei/lftf.html#context)

In short there is a dynamic link between education and the economy of which business is in the forefront. Whether research findings, such as from the University of Warwick, Hull (1997) and other researchers (e.g., Oblinger & Verville, 1998), or the calls from business for educational accountability in the preparation of youth for eventual inclusion in the workplace, the message is similar: education has a social

²⁶ In these "international benchmarks," cultural differences are ignored, whether geographical cultures (e.g., Germany, Japan, North America), or sub-cultures (e.g., education, business, ethnic, religious).

expectation (read mandate) to educate its people that includes preparation for the workplace.

Education has a utilitarian function, which Townley (1989) explains, "not only because it relates to the quality and productivity of the workforce and the competitiveness of...industry, but because it is the single most important factor in fighting poverty, homelessness, drug addiction and crime" (p. 3). But although education may be viewed as a grand social solution to a nation's ills, its ability to perform its duties is handicapped itself. Similarly with Hull (1997) and Eggleston (1992), Clendenin (1989) sees this and continues: "Business faces a paradox of imperatives: urgency and patience. We need a sense of urgency because the problems in education threaten our economic and social health; we need patience because these problems are numerous and deeply rooted in the larger troubles of society" (p. 7). The system of education, comprised of diverse roles and expected, is, as stated in the report of the OECD (1990), "a potent mixture" (p. 7), and "more extensive and complex than in the past" (p. 98). This understanding of education and its connection with the rest of society gives us a glimpse of the complexity we are facing regarding education and business-education partnerships.

One means of attending to some of the problems in education is by anticipating the needs of its graduates. Carnoy (1997) argues in an OECD report that, "workers that do best in flexible, learning organizations are good both at solving problems individually—the higher order thinking skills normally learned by students going on to post-secondary education—and, as important, at working with others in teams to innovate and motivate—a [sic] skill that is hardly touched upon in our present educational system" (p. 35). The OECD report urges: "Education for the

information age therefore should develop workers who have higher order problem-solving skills and who can help organize more learning. This suggests profound change in the curriculum of schools and in job training programs" (italics in original; p. 35). Darrah (1997) states that, "the main challenge for employers is to attract properly skilled individuals" (p. 252). The expectation is that education will fulfill, or help to fulfill, the demand for "skilled individuals." According to Marshall and Tucker (1992), "the emerging consensus on the skills needed to power a modern economy" is summed up as:

A high capacity of abstract, conceptual thinking;

the ability to apply that capacity for abstract thought to complex real-world problems...

the capacity to function effectively in an environment in which communication skills are vital...

the ability to work easily and well with others, and the skill required to resolve conflicts that arise with colleagues and assume responsibility for the work that needs to be done without requiring much supervision. (p. 80)

And according to Hull (1997), there is an expectation by industry that individuals will be prepared with the following "basic skill groups that employers believe currently are important:"

Knowing how to learn
Reading, writing, and computation
Listening and oral communication
Creative thinking and problem solving
Self-esteem, goal setting/motivation, and personal/career development
Interpersonal skills, negotiation, and teamwork
Organizational effectiveness and leadership. (cited p. 8)

From the information above the lists of skills suit the overarching list of workplace skills assembled, for example, by the Conference Board. What is perhaps confusing in the discussion of "basic skill groups" and lists, such as we see here, are the mixed

messages. The economic link between education and business is established, but the necessary skills, which are represented in curriculum documents, are arguably taught in education. Therefore, what are the actual problems and where do they lie?

Regarding the students of North American schooling, Marshall and Tucker (1992) state that: "There is no school-to-work transition program for these students [who decide against the university track], the vast majority of whom will constitute our front-line work force...they will get an unskilled, low-pay job for a while [sic], leave it, go on unemployment, get another job like the first one, and continue in this way" (p. 206). Perhaps it is similar thinking that causes Townley (1989) to claim: "It is a bitter irony that at a time of unprecedented high-tech affluence, virtually full employment and our highest level of mean education achievement, our school systems are producing so many 'products' subject to recall" (p. 4). That boom economy may have passed but the need for the alignment of interests is still there, and it might seem that the business-education partnership is one way of addressing it as the basis of a conversation or exchange of ideas—among educators, business people and students—rather than simply instituting better, more efficient transition programs.

Contrary to Marshall and Tucker (1992) or Townley (1989), Olson (1997) reports on programs in place that demonstrate a collaborative effort on the part of education and business in student transition to the workforce (also Saunders, 1993; Steinberg, 1998). On a local plain, some school districts throughout British Columbia, Canada, for example, have established a curriculum of work experience for the purpose of gaining firsthand experience in businesses, which the Provincial Ministry of Education terms "partnership," to complete graduation requirements. Whether or

not such benefits are practical or enjoyed is another topic. The point here is that organizations provide lists of desirable skills sought in employees and that education will accommodate these "lists" in the curriculum. Cultural considerations and partnership ramifications notwithstanding, the economic link with education is clear. How and what to do are wrapped up in different suggestions each implying a particular value set on educational purposes. Are partnerships the answer? Business argues in favor of partnerships in order to ensure a ready workforce and sustainable economy. Critics demand a pure education liberated from any shackles and completely funded by government. Perceptions, meanwhile, of what education should be doing and for whom, are diverse, covering a spectrum from purposes and form to structure.

Educational Reform

With the connection between education and the economy established earlier, and concerns about the role of education in society, calls for educational reform are plenty (see Popkewitz, 1995). Just as systemic factors in education are in need of clarification, so, too, are the perceptions of what is needed for reform in education. In a report concerning the role of children in society because of the current and near future challenges and changes to the family, Carnoy (1997) argues that the school needs to be transformed "to make it more open to the community, and accordingly, to provide the public school system with better trained personnel, more resources, better physical facilities, and more innovative management" (p. 42). The inclusion of community in the process of educational reform appears to be a reasonable expectation, but the lack of examples indicates that this, too, is a problematic endeavor (see Prawat, 1996). Nonetheless, Lowe (1997) believes that a growing

popular middle class has "involved themselves more than ever before in support and ancillary activities around their own children's schooling" (p. 68). This has moved to further influence the curriculum and schooling as parents want to ensure "that the education system remained the key agent for the intergenerational transmission of social advantage...Curricula, both formal and informal, had become as never before the passports to secure employment and full acceptance among the enlarged professions" (p. 69).

Despite the economic correlation between education and the workforce, Schweitzer, Crocker and Gilliss (1995) contend, "education does not provide good preparation for the working life of those students who are not academically inclined" (p. 47), a point reiterated in the literature (for example, Contenta, 1993; Marshall & Tucker, 1992). Eggleston (1992) reports that the British education system has been proactive for a number of years in student employability at the end of their schooling, an arrangement that also finds some convergences in other European countries (Marshall & Tucker, 1992). Although the transition from school to workforce would seem to be a necessary instrumental part of schooling, according to various researchers it is not practiced effectively or consistently, as I have already shown (Contenta, 1993; Eurich, 1985; Gibbons, 1990; Marshall & Tucker, 1992).

A principal reason for educational reform is so-called relevancy. That is, education is charged with being out of synch with the realities and needs of society in this information age. In business, the matter of relevancy is, theoretically speaking, readily solvable: alter marketing, make changes to the business plan, and enact the necessary procedures to implement the required changes. In education, however, the question of relevancy is examinable in two ways. First, it is arguable that

educational practice is relevant especially to its own culture. That is, the culture of education is structured such that it perpetuates a *status quo* because its programs are completely related to, and developed for and within, that systemic structure (Hodas, 1996; Marshall & Tucker, 1992; Welker, 1992). Second, education is not relevant to the greater needs of society. That is, high school leavers are ill-prepared for life after school (Alexander, 1997; Carnoy, 1997; Contenta, 1993; Davis, 1993; Gibbons, 1990, Marshall & Tucker, 1992).

Current formalized education has strong roots in the Industrial Revolution but is now at odds with its foster parent, business. That is, the principles that were used to direct business were argued to have "worked brilliantly for American private enterprise and there was no reason...why it should not work for the schools" (Marshall & Tucker, 1992, p. 16). Contenta (1993), commenting on Canadian education's historical development, states: "[Egerton] Ryerson was very much adopting the industrial model of organization—a not surprising result given that mass education followed urban industrialization" (p. 15). In a report for the Conference Board, Lund (1989) states, "success in education reform resulted where business leadership could influence the policies of community-wide education coalitions, compacts and collaborations" (p. xiii). For the Conference Board, education reform is associated with a national agenda and economic concerns. Thus, the primary purpose of education reform from a business (and government) standpoint appears to be economic utilitarianism.

Davis (1993), who comments on the education paradigm and workplace skills, claims that schooling tends to train for a paradigm no longer functionally appropriate, a problem, it seems, that is neither new nor readily solved (see Cuban,

1984; Gibbons, 1990, 1976). Aarshall and Tucker (1992) proclaim in agreement that, "most analysts now agree that the changing workplace demands not simply higher levels of mastery of the core subjects, but a different kind of education...Our curriculum reflects the needs of the economy of fifty years ago as does the performance of the average student" (p. 79-80), which has sparked a number of calls for educational reform from different organizations (Ashwell & Caropreso, 1989; Berman, 1987; Erickson, 1991; OECD, 1997; United States Department of Education, 1996). Similarly Resnick and Wirt (1996) point out that the work pattern that arose out of industrialization was "based on efficiencies of mass production...But conditions have changed, and the old system is no longer working" (p. 2-3) due largely to the expansion of information technology and transportation.

In an article in The Business Journal (1997) dealing with educational reform, the author states: "So before we rewrite the business plan for education, let's take a look at the good we've done...Education's not yet a complete disaster; there's still time to salvage it" (p. 169). One way to "salvage it," according to Lund (1989), is business endorsed "school 'choice' and school-based management programs as exciting new prospects for achieving education reform" (p. xiv). The Education Committee of the Canadian Chamber of Commerce (1994) in a report to the government of Canada recommends active assistance in supplementing education or educational reform. Among the many action steps it recommends toward a policy of lifelong learning, four are pertinent to this discussion:

²⁷ The understanding of "training" is left open. Davis is not implying school's are training grounds but that school-leavers are prepared for an era that no longer suits current social and workforce needs. The question, then, is what are students presently "trained" for if that is the case?

Action 31: Bring the world of work into schools to ensure young people are ready to enter the world of work when they leave school;

Action 36: Find new ways of using technology and of tailoring learning to the needs of the individual so that people have more opportunities to learn;

Action 37: Create a learning network based on technology links;

Action 42: Put in place an effective Canada-wide communications campaign to support learning throughout life. (p. 6)

All of these suggestions are worthwhile in their own right, but what is lacking is a consideration of how they might be implemented in the current education system, although suggestions exist elsewhere (Barron & Orwig, 1995; Benders, de Haan & Benett, 1995; Busch, 1995; Colley, Gale & Harris, 1994; Grint & Gill, 1995; Kay, 1992; Knowledge Architecture, n.d.; Lumley & Bailey, 1993; McGrath & Hollingshead, 1994; Murphy & Pardeck, 1991; Persichitte, 1995; Rockmore, 1995; Shashaani, 1994; Williams, 1994; Willinsky & Forssman, 1996). In addition, using technology to enable students so far has been a greater challenge than schools can effectively accommodate, especially for females (Busch, 1995; Kay, 1992; Klawe & Leveson, 1995; McLaughlin, 1991; Murphy & Pardeck, 1991).

Berman (1987) quotes the education historian, Professor Peter Dobkin Hall of Yale University who says:

If business seriously intends to shape the education agenda in the United States, it must set its sights more broadly. It must fully accept the fact that the business corporation is an instrument of social change—whether or not it is willing to exercise its power for change. The major waves of American education reform originated in and were carried forward by socially concerned business communities that freely acknowledged the ties between private profit and the public good. (cited p. 2)

Reminiscent of Alexander's (1997) description of business' social responsibility, Hall's comment fails to take stock of the social changes it has effected. Do we really want to

see education follow in the footsteps of business or be directed by business? Some of "us" will respond in the affirmative, seeing business and education in partnerships as a great way to implement educational reform while increasing profits. Others of "us" will look abroad and see what business is capable of accomplishing in the likes of Enron or WorldCom, for example, and have doubts about any collaborative arrangements with business. Again, the two sides belie more complexity. And conversely according to Marsha Levine, American Federation of Teachers:

A "restructured" school relies on teachers' expertise in designing and implementing learning environments. It recognizes the importance of people working together by providing time for teachers to talk shop, learn from one another, get feedback, and address the problems they share. These are the characteristics of smart work places—and we have learned a lot about them from business. (cited in Berman, 1987, p. 29)

The concept of teachers taking charge is imperiled by the forces acting against them, both within and outside the system of education as has been shown (Cuban, 1984; Lesourne, 1988; Lowe, 1997). This suggested reform mechanism coupled with doubts in society (Benevides, 1997; Contenta, 1993; Marshall & Tucker, 1992) seems doomed to fail at the start.

Calls for educational reform arise from a tension between "ought" (to change or reform) and "is" (*status quo* or usual practice). Business along with society is unhappy with the way education currently operates, or is. Researchers and critics have also commented at length on education's practice (Contenta, 1993; Cuban, 1984; Gibbons, 1990; Marshall & Tucker, 1992). Both education and business make suggestions about change, or how education ought to be. McLean (1991) reasons: "Because the practical inevitably involves an element of moral judgment, practitioners must retain a concern with what 'ought' to be. But the question

remains—is the inculcation of a set of ideals about how teachers *should* act sufficient [for example] in a teacher education program? Will knowledge of the 'shoulds' enable novices to reach those ideals in their own practice" (p. 228)? Consideration of how business-education partnerships could improve upon such problems is an additional question we need to ask. Or would partnerships compound the issue?

Some researchers present obligations, sometimes with recipes on how to enact the desired change. As an example, Glasser (1993) insists that we *must* "give up boss-management" (p. 2), and Simmons and Pitman (1994) state that teachers need to accept change. Giroux (1995) preaches an essentially Marxist list of oughts that would have the teacher be a political activist (p. 374ff). Lesourne (1988), commenting on the structure and politics of teaching, suggests that, "the best approach would be to create the conditions in order for the teachers to take charge of change and become its implementers" (p. 325). 28 The language of Zehm and Kottler (1995) in their recommendations for educational change includes "find," "make," "be," and "instill." Ornstein (1995), in his introduction about some of the critical theoretical perspectives, raises the issue concerning the need for teachers to "become conscious of the need to create a new dialogue with their students [and I would include pre-service teachers]: whereby they openly examine their inner thoughts and feelings and act out their visions of a better, more democratic and egalitarian world" (p. 15), or the "need for face-to-face relationships, honest dialogue, and authentic encounters" (p. 16).

²⁸ Lesourne says, "le mieux serait de chercher à créer les conditions pour que les enseignants euxmèmes…reprennent le changement à leur compte et en deviennent les moteurs" (p. 325).

One area of suggested reform in education is the professional development of teachers and administration. Jones (1992) maintains: "Staff training and development are the basis for quality in teaching performance, which means an improved service to their customers, encompassing individual pupils, students and parents; student teachers; in-service teachers; and individuals and employers from the business and industrial sector" (p. 177). Concerning the administrative structure of education, she urges:

Educational and training organisations will need to develop less hierarchical, more collaborative cultures in order to develop a partnership with their customers in which they are open to 'influence' from them...The need to become more flexible and 'customer friendly' becomes even more urgent as education, just as industry, increasingly needs to attract and cater for the non-traditional student in the 1990s. (p. 150)

The impetus to change in this suggestion is related to "market" pressures and not because there is something inherently wrong with the current practice of educational governance. Jones explains:

The cost of customer dissatisfaction in education will increasingly figure as schools, further education colleges and colleges of higher education, compete to attract customers—increasingly the basis of their funding. Those that do not provide an effective, flexible, customer-oriented service will become less popular, and ultimately go out of business. (p. 151)

Townley (1989) believes that: "Increasingly, companies have concluded that for educational reform to succeed, schools must be restructured from the bottom up. That's why a number of companies are targeting more of their resources onto elementary and secondary education" (p. 4). Giacquinta, Bauer and Levin (1993) suggest, "to be effective linking agents for [helping parents/families] in this process of educational change at home, schools must undergo substantial changes themselves and in their relations with families" (p. 185), a theme echoed by the OECD (Carnoy,

1997). Bacharach (1988) states: "If schools are going to help disadvantaged students, teachers need "skills in responding to students' life experiences, purpose, and perspectives. To the degree that standardization inhibits these efforts, an argument can be made that standardization only provides an illusion of equality and an obstacle to equity" (p. 494) in education.

Clendenin (1989) offers examples of projects where business has gone in and worked with, or provided on going workshops for, school administrators because "management is seldom a strength in schools" (p. 8),²⁹ or because business believes it can provide alternative practices that could greatly benefit education (Rigden, 1995). Robertson (1998) concludes in her book about education and enterprise: "Although they are fond of telling teachers how schools must operate more like businesses, educrats [presumably politicians and administrators] implement human resource development decisions that would be laughed out of business school" (p. 186). Despite calls for educational reform, there is a problem of consistency. That is the critics who demand a business-like system of education are incapable of implementing the changes they demand in some educational areas because of they lack the knowledge and skills to do so. The other reason for the calls for educational reform is relevancy.

Lieberman (1992) asks, however, "what do we do with school's [and I would add individuals] that for complex reasons of history, culture, and context, don't or can't change? Do we tell them what to do? And does that do any good?...Whose

²⁹ Although the examples given have to do with business and commerce, the reference to management in schools speaks to the hierarchical culture one tends to find there, according to, and convergent with, a number of writers (Bacharach & Shedd, 1989; Hargreaves, 1995; Hodas, 1996; Lowe, 1997; Marshall & Tucker, 1992).

reality do we act upon?" (p. 6). Liberman's question is a critical one throughout the discussion of education and business-education partnerships, particularly regarding purposes. There is no consensus of opinion about what needs to change in education, how to go about it, who should implement it, or to what end.

Pai and Adler (1997) urge that, "an understanding of the school-culture relationship is important in developing a theoretical perspective from which to assess and interpret the respective roles of school and society in a situation where educational reforms are needed" (p. 139). This point is a call to a systemic consideration and shared responsibilities. In an open challenge to calls for educational reform, they continue:

The reformers simply failed to understand that the school is only one of a multitude of institutions in our society and that no amount of tinkering with any single institution could bring about fundamental social, economic, or moral changes. On the contrary, without major social changes, educational reforms are bound to have minimal impact on our lives because the school as a specialized social institution reflects the culture of the larger society. (p. 140)

Pai and Adler are correct in assessing the complexity of the problem of educational reform as being systemically connected with society, an idea that converges with other findings concerning education in general (Ashwell & Caropreso, 1989; Carnoy, 1997; Eggelston, 1992; Hull, 1997; OECD, 1997).

Reasons for educational reform are as variegated as the suggestions of how to proceed with change. So far I have shown the problems apparently in need of reform are the school, the school and society, the curriculum or the administration. Contenta (1993), in a comment about reform in education, cites Ron Watts, vice-chancellor of Queen's University in Kingston, Ontario, who states: "Ultimately, I think we've been beating around the wrong bush all along. It's not the curriculum that's

the answer, it's the teacher. A lousy curriculum taught by a brilliant teacher will bring the student alive. A superb curriculum taught by a lousy teacher will kill him" (p. 27).

Robertson (1998) cites Ted Byfield of the *Financial Post* who judged, "we have a public system completely divorced from self-evident reality that cannot or will not change. So there can be only one solution: get education away from the public sector and let it be market driven...The 'professionals' plainly do not know what they're doing" (p. 35). In these cases, teachers are viewed as the problem with education and where reform needs to take place. A counter to the blame shift onto teachers comes from Marshall and Tucker (1992) who note in their writings on education and the economy that many teachers "felt that some parents were not willing to be accountable for their own children but were quite willing to hold the schools accountable for things over which the school had no control" (p. 122). Along with teachers and parents as additional educational problems, educators on a wide scale are included. Darling-Hammond (1993) notes that:

Efforts to create more socially connected "learning communities" are buttressed by research evidence on the importance of alternative organizational arrangements—smaller schools fostering caring, common learning experiences of relevance to students, positive faculty and peer relations, cooperative work, shared values, and participation of parents, teachers and students. (p. xviii)

Despite her observation of creative and humane efforts, the "adventure" of education remains largely unchanged (Contenta, 1993; Cuban, 1982, 1984). Part of the rationale for educational change is found indirectly in another OECD (1997) report on the economy and learning in which we read, "the information revolution is obviously bringing the world closer together, bridging the gaps of physical distance. It affords all of us, therefore, the opportunities to learn from people who are far

away—not only physically, but also culturally. In this sense, it makes creativity and innovation even more formidable forces for economic growth" (p. 47). Examples of the integrative role of IT between school and community are reported by Holte (1995) and Jonassen (1995). Carnoy (1997), in another OECD report, suggests a number of educational changes:

Learning in schools should itself be increasingly organized in a cooperative fashion where students study in groups, present group work, and often get evaluated as a group...[and] curriculum should include the development of networking, motivational, and teaching skills so that students develop a clear understanding of human behavior and the understanding of group processes. In the learning-centered environment of the information age, the process of learning and the motivation to learn should become endogenous to curriculum itself. (p. 35)

This is a critical matter for which the role of community-education partnerships may be ready made. From the foregoing information, two questions arise: Could business-education partnerships adequately prepare young people for the (transition to the) workforce? Dana (1994) believes so. And how could the systems of education and business dispassionately inform each other so that the decision to partner could be the most beneficial to students? Although I do not delve further into these questions, I raise them here as points in need of discussion by education stakeholders. Be that as it may, education as a complex system continues to resist not only systemic reform but also its umbilical link to the economy.

One means of reforming education is to open it to free enterprise. Business has been a vocal advocate of education reform. Foster (1989) challenges: "The metaphor used here [to describe business-education partnership progress] is 'A third wave,' but I am not sure that is correct. We need an earthquake that causes a tidal wave before we are going to get the type of educational reform that is necessary" (p.

64). Lisa Benevides, in a Boston Business Journal (1997) article promoting a strong call for educational reform notes, "if existing schools can't take care of students, the marketplace will," said Michael Sandler, CEO of EduVentures, which offers for-profit education companies banking and consulting services." For business, the people who will eventually occupy places in the workforce will come from either the educational institutions within society or else from abroad if suitable local workers are not available. Galbraith (1967), in his work on modern technology and the state, claims, "the industrial system must rely on the state for trained and educated manpower, now the decisive factor of production" (p. 391). By the same token, however, he adds: "The industrial system has induced an enormous expansion in education. This can only be welcomed. But unless its tendencies are clearly foreseen and strongly resisted, it will place a preclusive emphasis on education that most serves the needs, but least questions the goals, of that system" (p. 371).

To ensure that business' ideals are not given preeminence in educational purposes, people must become educated about the implications of the "industrial state" before its ambitious goals become the guiding principles of the whole state. Robertson (1998) reports: "Prevailing wisdom concludes that education reform is an economic imperative, driven by the best interests of young people, who will be subject to the uncontrollable appetites of the global economy" (p. 10). What is the best approach, though, to allay fears of profiteering on the backs of students? Theoretically that should entail collaborations between government, business and community with education. We can see the suggested problems of education run the gamut of possibilities, which proves all the more that the system of education is a miscomprehended complexity and not to be remedied by a singular fix. In the same

way, business-education partnerships may not be the best solution to the needs of, and problems in, education, but critiquing them on the basis of individual systemic factors will not serve to stop them from setting up.

On The Workplace

I have already discussed problems with the transition from high school to the workplace, or life past school. In this section I examine the workplace in more detail to situate its role in the discussion of business-education partnerships. Upon their departure from high school, young adults likely will seek employment in a workplace. The workplace has been in the process of changing especially with the influence of IT. The workplace—that place where one performs work—covers the spectrum of possible places and can be as formal as in corporate headquarters or as informal as in the home. An OECD (Carnoy, 1997) report views "workplace" as a specific locale where one performs work.

Changes in the workplace have also come about as a result of social change. The report indicates there has been a degradation of social values. This degradation is evidenced by "a serious erosion of membership in volunteer associations, as a result of individualistic values, time constraints, and dual job families" (p. 22). A suggested consequence of the changes in social values is that the workplace environment has been affected and, consequently, has had an impact on various systemically related matters, such as skills requirements and expectations.

The OECD (Carnoy, 1997) comments on workplace in a report on education and business:

In the global information economy, the very nature of the work system is changing—away from permanent jobs as the locus of work toward a complex network of learning institutions, including the workplace, families, and

community schools. Yet, these [various economic policies and] strategies continue to focus on jobs simply as jobs or to focus on social support systems based on jobs. (p. 26, italics in original)

There are some social institutions—education being a major one—that fail to accommodate change and its effects in the workplace. Education is charged with suffering from outdated information or experience that in turn could adversely affect most high school leavers who will, at some stage in their life, seek employment. Although education is not so directly affected by changes in the marketplace as is business, nonetheless, changes in the workplace have repercussions for students, possibly suffering "under information" (Eraut, 1991).

In a recent study by Accenture, an international consulting corporation, and the Conference Board, 506 corporate CEOs from around the globe were asked to "name the critical external threats to their businesses and industries" (Romita, 2001). Although there were nearly twice more North American corporate CEOs asked than their European and Asian counterparts, the numbers presented in the final report indicated a "shortage of key skills" by workers as the top concern for North American and European CEOs and only of medium concern for the Asian CEOs. 30 Although needs are seemingly different in Asia compared with North America or Europe, the point here is the concern about workers with skills readiness for the workplace ranks very important to business.

One of the points that economic futurist Jeremy Rifkin (1995) argues in his work on the effects of IT is that the "third industrial revolution," or "high tech" change in markets around the world, has had the effect of altering the workplace (also

³⁰ Caution is advised in the interpretation of the "data" presented in Romita's article. There is no reference to the actual questionnaire or how the numbers were determined.

Benders, de Haan & Benett, 1995). The OECD (Carnoy, 1997) notes, "it is argued that certain social trends such as breakdown of family and community bonds have tended to exacerbate the damaging effects on people's lives caused by a more insecure labor market" (p. 6). The report helps to extend and build upon Rifkin's thesis. It states:

The defining issue of tomorrow's work lies elsewhere [rather than in "fears of mass unemployment" due to new technologies]: Men's and women's work is being transformed by new technologies but the social institutions needed to support this change are lagging far behind...[Indeed,] *institutions and the social organization of work seem to play a greater role than technology in inducing job creation or destruction.* (p. 9, italics in original; see also Klawe & Leveson, 1995)

Galbraith (1967) saw a similar fate. He maintains:

If we continue to believe that the goals of the industrial system—the expansion of output, the companion increase in consumption, technological advance, the public images that sustain it—are coordinate with life, then all of our lives will be in the service of these goals. All other goals will be made to seem precious, unimportant, antisocial. We will be bound to the ends of the industrial system. The state will add its moral, and perhaps some of its legal, power to their enforcement. (p. 398)

The implication from Galbraith, Rifkin or the OECD is that although the workplace has been/is being altered by emerging technologies in this information era, the corresponding social institutions may unwittingly acquiesce to the perceived greater good of technological change. To add to the growing list of areas in need of reform, the challenge here is to societies, their organizations and institutions that will need to create awareness of change in the workplace and its consequential effects in other social organizations and institutions.

The OECD (1997) states in a report: "To reap the benefits of new technologies, firms need to change their organization in a direction which involves flatter hierarchies, employee participation and self-directed work groups. Hence, the

organizations in the knowledge-based economy are built on multi-skilled workers, able to make decisions and cooperate across departments and units" (p. 53). The OECD's challenge to business hearkens back to Alexander's (1997) or Rifkin's (1995) comments to business about change. But it is equally a challenge to education. The hierarchies that exist in education are similar to those being encouraged to change in business. And there is an implication that other systemic factors and elements will need to be reshaped.

Not all workplaces have changed or do change equally even in light of the global impact of IT. Contenta (1993) suggests, "with computers becoming as common as telephones, it's naïve to assume that schools will keep their monopoly on education" (p. 193). Presumably IT will have an impact on education through technological developments and enterprising visionaries who view education as a broader economic market rather than an exclusive socializing agency. In fact, education is charged with resisting the new technologies. Hodas (1996) in his work concerning technology and school resistance, claims that, "schools' natural resistance to organizational change plays an important (though not necessarily determining) role in shaping their response to technological innovation" (p. 199). Certainly all workplaces have been affected as computing technology increases the pressure on businesses to become part of a global IT network. The "new class" of workers is comprised of those who are able to capitalize on IT, thus creating a culture of nouveau riche, according to Rifkin (1995), and a digital divide for the "have-nots" (see also Boyles, 1998). Those people, for varying reasons, who do not acculturate themselves in the IT environment will become disadvantaged, creating a class impoverished financially as well as functionally in the new economy. That there will

be an impact on education, directly or indirectly, is certain. As this "new economy" develops, high school graduates and leavers are bound to face greater pressures to seek additional education just to get a low skills job.

A report by the Education Committee of the Canadian Chamber of Commerce (1994) notes that the nation's "failure to encourage technology has resulted in negative productivity growth" (p. 39), which presumably has a negative impact on employment. Certainly that is the feeling of Buchanan and Yoon (1994) who state, "technological change...lies at the heart of economic growth...[T]echnological change arises in large part because of intentional actions taken by people who respond to market incentives...[T]his does not mean that everyone who contributes to technological change is motivated by market incentives" (p. 288). Marshall and Tucker (1992), in a strong message to nations in their study on work and education, insist: "The future now belongs to societies that organize themselves for learning. What we know and can do holds the key to economic progress, just as command of natural resources once did...The prize will go to those countries that are organized as national learning systems, and where all institutions are organized to learn and act on what they learn" (p. xiii). Social institutions, such as education, are encouraged to respond.

But Bricken (1991) challenges the drive to technological change: "There's no doubt that cyberspace and virtual world technology are empowering; but exactly who is being empowered...The current development of relatively inexpensive systems along with high-end models indicates that the technology will be widely available. Once we are there, who is in control?" (p. 378). Bricken asks: "When cyberspace becomes commonplace in corporations and schools, how will the power

of the technology be distributed?...Who decides how cyberspace is used in schools?" (p. 379). Will teaching and schooling become technologically cluttered such that teachers are left to scramble about trying to figure out how to relate to an elite computer culture comprised largely of adolescents? In a familiar tone as Lieberman (1992), who decides? And of equal importance is the question of who controls the controllers.

Another critical question in need of raising is how social institutions such as education are to manage the costs of IT and budgets when funding for education is unable to keep up with the demands. Business-education partnerships have been the main response to this dilemma. But as we have also seen earlier, business-education partnerships exist as *ad hoc* arrangements lacking consistency and success for both partners.

The discussion thus far has traced the development of education as related to business through the Industrial Revolution and Taylorist principles, and has established the connection with the economy and workplace. Business-education partnerships, also complex systems, transcend workplaces, offering a common ground with many possible benefits to both partners.

On Business-Education Partnerships

Business-Education Partnerships: Practices

Under the "specific recommendations" set out by the Education Committee of the Canadian Chamber of Commerce (1994), technology-related means of encouraging and developing lifelong learning skills are stressed,³¹ as is the

³¹ For example, the Social Sciences and Humanities Research Council of Canada is urged to "include

establishment of a "Canadian Association of Partners in Education' in order to facilitate further development and effective use of business-education partnerships across Canada" (p. 8). Business in partnership with education continues to be regarded with a kind of acceptance by some people as the next phase of ensuring educational funding or reform (Close & Martin, 1998), and to others as a challenging, educational menace to be dealt with (Boyles, 1998; Molnar, 1996; Robertson, 1999, 1998).

Purposes of business-education partnerships, like calls for education reform, also demonstrate variety and lack of consensus. Forrest, Miller, and Fiehn (1992), whose research is on industry mentors in schools, focus their attention on the practice of industry and education leaders collaborating in management. The purpose of these collaborations is to "work together with one another and talk to each other in a language both understand, [because] there are many issues of a mutual concern on which industry and education can agree and move forward" (p. vii). The kind of partnerships of which the authors speak includes long-term secondments of teachers to industry and industry leaders playing a governing role in education. However, the authors caution that such collaborative efforts by business and education that exist merely on the plain of curricular enrichment, such as classroom visits or on going arms-length business support, "depend far too much on the goodwill or long-term enlightened self-interest of the business sector; at best a vulnerable and not totally reliable commodity" (p. vii). Forrest, Miller and Fiehn do not view short-term visits in the classroom as an effective means of ensuring reform

considerable emphasis on technology-based tools to support continued learning" (Chamber of Commerce, p. 7).

or strong links between industry and education. Perhaps the key point is in the authors' insight that "education needs better public understanding of its difficulties in satisfying the expectations of a society whose needs become ever more sophisticated" (p. vii). This implied educational relevance and systemic problems converge with similar findings in the literature. As a response the authors note, "industry has the potential for being a major ally of education, arguing its case in places and ways that education could not hope to achieve by itself" (p. viii). Here it is worth noting the self-perception of business, or the perceptions of business that others have, that allow it to be able to mediate for education, as though business has a clearer and better grasp of its needs and purposes.

On a comparative international note, Japan, Sweden, Germany, Denmark, and other major economic powers that enjoy perhaps greater education success stories, at least according to Marshall and Tucker (1992), have been practicing collaborative arrangements between business and education. Denmark, for example, practices an alternative process with those youth who opt for training rather than university. Marshall and Tucker explain:

Through this whole process, each team member must keep a diary recording the problems encountered, the approaches taken to address them, and the progress made in acquiring the skills needed to meet the standards set by the employers. Each trainee meets regularly with his or her teachers, and uses the diary as a basis for discussion with the teacher to evaluate progress. The students are expected to manage their own learning process and constantly to assess their learning. The teachers act like mentors and coaches, but they do not engage in direct instruction. The learning process in this scheme has become a paradigm of the work environment—and learning process—in a high-performance work organization. (p. 205)

A number of issues arise from Marshall and Tucker's depiction of Denmark's "success." No doubt there are many beneficial features in that country's—and

others'—educational practices. How were these students, though, able to "manage their own learning process and constantly to assess their learning" process? The authors say there was no "direct instruction." How are the students to learn that what they are doing is actually a "paradigm of the work environment"? How efficient and effective is the program? What constitutes an effective partnership? These questions remain unanswered in Marshall and Tucker.

The Chamber of Commerce's *Focus 2000* (1990) guide makes recommendations concerning the roles and responsibilities of the key players in a business-education partnership, suggesting a partnership coordinator, a business/industry representative, a business/industry coordinator, a school representative (such as the principal), and a school coordinator (such as a teacher). The guide even provides a model of what such a partnership would look like. The suggestions, however, tend to be broad and general. While such generalities provide for an opening dialogue between partners with education, the guide does not provide directions about how to deal with suspicions, expectations, or the cultural differences and similarities that exist in the two systems. In short it fails to consider the systemic complexity involved in partnerships.

While there are seemingly many benefits to be shared in education partnerships (Bodinger-deUriarte, Fleming-McCormick, Schwager, Clark & Danzberger, 1996; Close & Martin, 1998; Doyle & Pimental, 1997; Morley, 2000), a number of issues associated with them in the past remain problematic. Marsha Levine, American Federation of Teachers, for example, suggests that the key issues regarding educational reform—"restructuring, accountability, choice and distribution

of resources—is complex, and the involvement of the business community adds a new level of complexity" (in Berman, 1987, p. 29).

One reason for changes in business-education partnerships over the past 40 years is offered by IBM CEO, Louis V. Gerstner Jr. who claims, "business was not given enough control over school practices in return for the enormous amount of money it was contributing" (cited in Molnar, 1996, p. 9). This "enormous amount of money" (no figures were offered) has been questioned elsewhere in the context of corporate profits and government tax-breaks offered to corporations for education donations (Marshall & Tucker, 1992; Molnar, 1996; Robertson, 1998). Townley (1989), in a Conference Board report, cites a number of business-education partnerships where financial assistance is tied to specific conditions. Townley says: "Some programs...are being re-evaluated and demanding something more: that in return for generous aid and the promise of jobs, schools get their test scores up and their dropout rates down" (p. 4). Lund (1989) found that "most business/education partnerships, while well-intentioned, are localized, isolated and fragmented" (p. 3), and that business expressed "general dissatisfaction with the results of these relationships, in such terms as 'episodic,' 'fractionated,' or 'a short fix'" (p. xiii).

Townley (1989) reports that business-education partnerships are already in their "third wave." That is, the history of partnering as a joint agreement between education and business began as "adopt a school program" in the 1960s and moved on to the "second wave" wherein greater accountability was demanded of educators by partnering or sponsoring businesses in the 1970s. This second wave, featuring more "company-sponsored programs, most of them designed to generate high visibility for individual corporations" (p. 5), saw business questioning the activities

and results of their efforts from the first wave. Positive results of partnering were seen by Forrest, Miller and Fiehn (1992) who state in their study of educational short-term involvement in industry:

[Business] links with teachers, in particular, afford opportunities to break down stereotypes and perceived anti-industrial values. The same arguments can be made for *community involvement* which can enhance the company's reputation in the locality in ways which are often difficult to quantify. The *publicity* arising from reports in the local press about particular companies' involvement with schools can improve public image and raise consumer awareness. (p. 8; italics in original)

Writing about business ventures in education, Molnar (1996) states that business-education partnerships have "increased dramatically." He reports, "in 1984 [in the United States], such partnerships existed in only 17 percent of the nation's schools...[and that by 1990 these had increased to] 51 percent of America's school districts" (p. 2). 32 Stern, Stone, Hopkins, McMillion and Crain (1994) provide a number of examples of a type of partnership referred to as "school-based enterprise" in which schools actually perform real-time service in the community for compensation, such as building projects or working in a specialty restaurant (pp. 33-35, 94-95). Business-education partnerships continue to run the gamut of arrangements, from "1st wave" to "3rd wave" types. The development of business-education partnerships over the past 40 years, along with the available critique of them, seem to have had little impact on what to do or how best to proceed in partnering together.

A number of online resources provide suggestions and models as guides to the perplexed in business-education partnerships, but these tend to be examples of

³² What is missing here is the discussion of what entails a "partnership" for Molnar. Also, note the change from percentage of "schools" to percentage of "districts." In essence this is a book about the corporate impetus of Whittle's "Channel One" project, an attempt to bring corporate advertising into schools via free television sets in classrooms.

linear thinking and often only focus on one systemic element or factor as if the answer. 33 Such an example is the United States Department of Education website (1996) that touts: "A Four-Stage Plan for Action to Begin an Active Business-Education Partnership." The substance of this part of the site centers on partnership goals and claims that through the four "stages" of vision, leadership, measurable indicators and continuous improvement, "partnerships can have lasting effects on student achievement and—ultimately—business success" (http://pfie.ed.gov/txt_four.htm). But the website authors do not delve into either concrete examples of lasting effects or how they justify such desires. Business success is easier to understand: increase profits, market share and company profile. The guidelines do not assist business or education to understand some of the systemic factors and problems associated with partnering.

The "third wave," from the 1980s and into the 1990s (and continuing into the new millennium), refers to the period of conscious change by businesses to being more selective in their partnering with schools. According to Townley (1989), the third wave arose as a result of business' dissatisfaction with business-education partnerships.³⁴ Business began to define partnerships in terms of corporate policy and strategy, and active involvement in school curricula "that have a direct impact on current and future jobs" (p. 5). According to Townley business began to ask: "Why is progress so slow? Are we [businesses] really making a difference [in education]?" Townley concludes that, "adopting schools and buying uniforms for school bands

³³ There is a prolific number of online resources on business-education partnerships.

³⁴ These reported events took place in North America.

and basketball teams made some local people happy; but business leaders began to realize that this had little to do with true education reform" (p. 5).

Business-Education Partnerships and Educational Reform

In her critical work about business and education in partnership Robertson (1998) comments that, "people who are determined to change the world are drawn inevitably towards school. Some of them want schools to foster the growth of human potential, and others are looking for greater work force productivity" (p. 8). The relationship of business-education partnerships and educational reform has already been broached in previous sections. This is not to suggest that partnerships only exist to help achieve reform. A Chamber of Commerce report (1990), speaking of the implications of "a technologically-oriented global economy," suggests, "partnerships are one way to achieve [a] sense of community" (p. 19). Some researchers also claim that there is a political interest in educational change. Lowe (1997), in his research on schooling, notes that with economic change comes an education system that "appear[s] outmoded and dysfunctional" and that influences a "political agenda" (p. 44). Fearing that education is no longer meeting the needs of the industrial state gives rise to alarmist reactions and calls for educational reform. Young and Gauss (1994) exhort business to "work with educators on a cooperative basis...[and] become full partners in the preparation of the workforce" (p. 12).

Not all business "expertise," however, is appropriate for education. As an example, Marshall and Tucker (1992) report that in a large New York State school district, "loaned" personnel from the Xerox corporation applied their business principles in the school district in an attempt to restructure the school (p. 115). Although the principles were highly effective in Xerox and other corporations, the

changes that were expected in the school system were frustrated in the end. Two key factors apparently were not part of the corporate culture. The particular school district in question was viewed as a "political fishbowl" and the educators believed they had nothing to lose if any of the suggested innovations or reforms failed; their jobs were still safe (p. 118). What might work in some business settings proves not to be readily adaptable to the system of education. Educational relevance is a problem, but it is part of a number of factors whose solution demands a systemic response.

Arguing the positive effects of business-education partnerships and social cost, Marsha Levine (1987), speaking on behalf of the American Federation of Teachers, states that, "the Committee for Economic Development reports that return on investment in the education of young children at risk is as high as four to one—in terms of money not spent later on remedial education, unemployment, welfare, health care, and crime prevention" (p. 29). The thrust of Levine's comments, similar to arguments of the OECD (1997) or Carnoy (1997) and other researchers, is that there are far greater societal benefits when business becomes involved in education. Economically, it could be argued that business—and society—would be socially remiss if they did not move on the project of educational reform.

Price (1992), in his work on industry-education arrangements that allow for educators to gain first-hand experience in other workplaces, writes: "The gap that exists between the education system and the world of work needs to be bridged for the sake of both the youngsters and prospective employers..." (p. 30). Berman (1987) maintains in a Conference Board Report on the necessity of educational change that, "meaningful reform, many insist, must consider the changing requirements of the...job market" (p. 1). Furthermore Berman claims business-education partnerships

are a means of achieving educational reform through which "the business community...should explain more thoroughly what kinds of skills its work force will need; should provide guidance and expertise on management and appraisal of the school system; and should involve top management in the planning process" (p. 1). Marshall and Tucker (1992) agree and insist:

Much more than business involvement in setting school-leaving standards would be [examining needs]. Many firms would have to help build the science and math curriculum; set technical standards for apprenticeship programs; offer opportunities for on-the-job training; provide mentors, job opportunities, and personal support to disadvantaged students; and offer real rewards to students who work hard in school. (p. 121)

Examples of business and education collaborating to attend to some of the problems of educational relevance is the Calgary [Alberta, Canada] Educational Partnership Foundation (CEPF; 1999-2000), an independent, non-profit organization, and the Alberta Science Foundation (ASF). The CEPF acknowledges: "Business realizes the current constraints on education; education recognizes the workplace applications of the curriculum and the importance of life-long learning to train and re-train for today's ever-changing business environment" (http://www.cepf.calgary.ab.ca/cepfbusn.html). Similarly, the ASF (Spectrum, 1995), "a not-for-profit organization incorporated in 1990," advertises on the Web: "Partnerships...can take many forms...[that could] encourage understanding and awareness in different areas...it also encourages Albertans to pursue careers in science and technology, and raises the overall level of understanding of science" (http://www.worldweb.com/ASBA-Spectrum/partners.html). The strategic plans on the site indicate activities that are material resource provisions to supplement school curricula. What is not clear is how those materials were developed, by whom, or the

longterm benefits of partnering. In this case a partnership is sought with a focus to improve a particular curricular area: science. But how are educators to respond to this activity of the ASF? On the one hand it would appear that the ASF is providing a supplementary service to education. On the other hand the implication is that education is not performing the task of informing students adequately about science and technology relevant to industry. In essence, the ASF site itself can be seen as a practical step to educational reform.

學的學樣響 1. 生物學與過程

Jones and Maloy (1988) speak directly to the problem of business approaching schools for partnering and issues of educational reform. They contend that, "school improvements depend on a realistic and shared sense of educational purposes by teachers, school administrators, members of outside organizations, policy-makers, and voters" (p. xiii). A critical point that they make ties in with earlier the discussion of the purposes of education. Jones and Maloy suggest, "school partnerships may exacerbate persistent tensions and political pressures around the purposes of schooling" (p. 7). They explain, "when outside partners urge...[changes in student outcomes] or rapid dissemination of technological breakthroughs, they raise issues of competing values and means" (p. 8). Over time, "competing values and means" along with divergent perceptions of purposes and other systemic factors, are bound to have a negative impact on business-education partnerships and on determining the best approach to partnering.

Gayton (1989) notes in a Conference Board report that business focuses on K-12 education because it believes academics and the skills needed to make a better life are "directly related to the economic well-being of the state" (p. 17). As an aid to skills development, the same authors generalize that some businesses actually

"encourage [employees] to become more involved in their local schools" (p. 17). Other examples of collaborative partnerships found in the Conference Board (1989) report of education partnerships include employees becoming more directly involved in their local schools, corporations becoming involved in the development and delivery of curricula, and even executives instructing students in the summer and on weekends to help them to prepare for local and state tests. Ultimately the calls for reform and requests for partnering will have to confront two problems. The first is the problem of purposes of education and the second is mapping and understanding the systemic factors of business and education in partnership.

Benefits and Problems of Business-Education Partnerships

I have shown the general development and practices of business-education partnerships over the past 40 years. What constitutes "success" in these partnerships is evidently as varied as the partners. In a study of industry mentors with schools in Britain, Price (1992) observes:

The most effective means of communicating [information about the world...and the] way to achieve greater awareness among the potential work force and the community at large...was not through presentations to students...however charismatic the presenters might be, but through a progression of experiences designed to bring an industrial dimension to the 5-19 curriculum as a natural element of children's learning. (p. 30)

In other words, the brief appearance of a "representative" from industry in the business education or law 12 classes is limited to an infomercial session by business—and perhaps all too often the mainstay Human Support type of partnership—but it does not actually benefit the student as much as one would like to believe. What have lasting positive effects, or enhanced student learning, are sustained relevant

experiences through education and the world of work as a collaborating, unified force in the students' lives.

Manders (1987) theorizes there are key "elements in common" in successful education partnerships:

Reason: The reason for each partner's involvement must be sincere and realistic, or the superficiality will become apparent and the partnership will degenerate into "take what you can get."

Attitude: An attitude of cooperation and mutual respect must underlie the partnership, and business must avoid the condescending role of an "expert" coming to correct inadequacies with limited involvement.

Person: The selection of the individuals involved must be based on their sincere commitment to the partnership effort as well as their qualifications and ability to get the job done.

Period: Meaningful programs require commitment and continuity over a long period if students and teachers are to place any faith in them.

Organization: Following up on the logical steps in any project—from researching to budgeting, planning, launching, and guiding the project—is crucial to the success of the program. It helps ensure that the partners' goals are not in conflict.

Relationship: The partners must be equals, so that each will feel that he or she is contributing and that the attributes of each will be recognized and used.

Teacher input: Teacher input and support is essential to the formulation of programs designed for the classroom. (in Berman, p. 34)

Mander's list is important but what ensures the equitable development and implementation of the elements in this list? And perhaps more importantly, where are the broader systemic considerations and discussion of educational purposes?

But relationships between business and education are tenuous arrangements partly because of the cultural differences that each exhibits. In their work on the cultural development of education, Pai and Adler (1997) explain:

[Culture is] most commonly viewed as that pattern of knowledge, skills, behaviors, attitudes, and beliefs, as well as material artifacts, produced by a

human society and transmitted from one generation to another. Culture is the whole of humanity's intellectual, social, technological, political, economic, moral, religious, and aesthetic accomplishments...[that] should be seen as an integrated set of norms or standards by which human behaviors, beliefs, and thinking are organized. (p. 23-24)

"Culture" is essentially a particular narrative or mythos that unites individuals by adopted assumptions and practices (see Appendix 6 for a more in-depth discussion of culture). In a report on ITM, I quoted Dawn (B) who mentioned that, "cultural differences exist [in schools]. Schools don't understand how business operates. Contracts and deadlines, for example, must be honored...[Educators] don't like it when we come on like business" (Després, 1996a). Pai and Adler remind us that, "though we cannot know all the details of either our own or another people's cultural map, an understanding of the general terrains of the group's culture would help us to be more effective in relating to others and achieving our own purposes" (p. 26). There are differences in core mission, culture, structure and environment between schools and outside workplaces. Because there are differing views on and perceptions of education purposes and community involvement, it is inevitable that conflicts will arise. Pai and Adler (1997) state, "education as an acculturation process can also be viewed as the modification of one culture through the continuous contact with another. Antagonism often results when one culture is dominant, and this antagonism becomes exacerbated by the dominant culture's attempt to speed up the process" (p. 43). Pai and Adler emphasize only a few of the many systemic factors and elements, or "terrains," that comprise systems, or in this case the systems of business and education. The systemic factors of education and business are in need of such understanding in light of the developments of business-education

partnerships and their potential increase in response to limited public funding of education.

Theoretically the realized benefits of business-education partnerships to education are material/financial resources, collaborations and "enhanced student learning" (Conference Board of Canada, 1997; also Calvert, 1993: Cornell, 1996; Zimmerman & McIntire, 1996). However, Robertson (1998), sharing some concerns about purposes of partnerships, surmises:

Cutting funding drastically is the quickest way to ensure that schools do less with less. Standardized tests, reported school by school, will document this decline and stimulate demand for alternatives. Taking away the local government's right to compensate for lost funding by levying school taxes ensures that all schools will decline, except those in affluent communities championed by persistent fund-raisers. Schools starved for resources will naturally court private-sector partners, whose demands that students learn employability skills must be respected. (p. 45)

On a basic level the potential benefits to schools include the acquaintance with new skills and workplace knowledge from a first-hand source, increased resources, and funding for projects and relevancy. For business partnership benefits range from positive PR in the community, to tax benefits, to professional development of business and increased profit.

Business-education partnerships, however, are plagued with a number of issues, some of which I have already mentioned. Some writers fear there may be an encroachment of "academic freedom" through business-education partnerships (Ekelund, 1993; also Duncan, 1992). Outsiders, in light of A. Hargreaves' (1993) description, may offer greater benefits but at a possible cost of disrupting the norm, the *status quo* of schooling or the cultural routine. Perhaps they might even pose a

threat to teacher identity and practice.³⁵ Levine (1987) says: "Educators, who had already lost support as a result of declines in the public school population, saw the business community as a potentially powerful ally—but one whose involvement might result in distorted goals or 'vocalization.' Education for the common good might lose out to education for personal or corporate gain" (cited by Berman, 1987, p. 26). In one business-education partnership, Friedberg (1989) notes how one attempt by partnering business persons to be directly involved in helping with remedial math and English drew a negative response from teachers with whom the team had been working throughout the course of the academic year. The teachers "did not want any volunteers. Some of the teachers are still very protective of their classrooms; they see them as their turf" (p. 30).

Along with this educator identity and uncertainty of educational purposes are differences between, and expectations of, business-education partnerships.

Forssman's (1999) following comment helps to shed some light on some of these systemic differences and expectations:

The new wave of computer technology that was being implemented in the lab in my neighbourhood school seemed very vulnerable, lacking any systems architecture or apparent support mechanisms or training for the teachers, let alone imaginative, collaborative, knowledge-building applications. An active dialogue about skills development needed to be undertaken, because even as the schools upgraded their technology, the question of what and how they were teaching seemed to beg for participation from those of us that lived and worked in the business world.

Why, in 1993, when the Internet was settling into the office and women into the boardroom, were the computer science classes primarily boys-only, while the "data processing" classes were filled with girls seeking secret Times New Roman success in a '60's-style typing class, learning keyboarding skills of

³⁵ I am merely raising the question in light of the findings by Contenta (1993), Cuban (1984), and Hargreaves (1993), for example.

Microsoft Word, but risking the same pink-collared demise as Smith-Corona? Meanwhile, the telecommunications networks that we were implementing for corporate clients at Systemhouse had great potential as collaborative learning environments. At this stage, neither the school community nor business interests had even begun to quantify how we might multiplex more than just the computers, bringing together the social value of connecting corporate return-on-investment with educational return-on-literacy through learning networks. All of these educational gaps were juxtaposed by an equal blind spot on the part of my high technology industry. This engine of economic growth with its growing labor shortages, had yet to articulate what it wanted from the schools, and what it could offer back to public education in terms of both technology and curriculum. (Forssman in Forssman & Willinsky, 1999)

The differences in expectations are understandable in the context of cultural nuances and the assumed purposes of education. It is Forssman's last statement that draws a connection between education and business that points to the potential benefits of business-education partnerships.

According to Forssman and Willinsky (1999), "business, when it is drawn into working with education in development partnerships (as opposed to vendor-customer relationships), needs to understand that differences in culture are underwritten by differences in economy, in principles and practices." Suspicions remain in education as it questions business' motives when they offer assistance.

Robertson (1998) quotes: "Investing in education is investing in the future of business" (cited p. 6). But the flip side of this, as reported by one author in a Conference Board report, is the reality of business' suspicion of education, in this case whether or not "the schools would live up to their side of the bargain" (Ashwell & Caropreso, 1989, p. 38; also Forssman & Willinsky, 1999). In another case, in a conference presentation Suzanne Gagnon (1998), Vice-President, Corporate Affairs, Glaxo-Wellcome Inc., argues that businesses in business-education partnerships face challenges such as "mistrust of 'Big Business,' differences in culture, values, language,

fear of losing control, unclear/unrealistic expectations, resource issues, and communication issues" (http://www.conferenceboard.ca/cben/glaxo).

The reaction of unions and their workers is another potential problem in partnerships. In an evaluation report of ITM, some union officials were concerned about non-union people—in this case students—completing tasks normally done by union members. The issue was resolved "with an agreement" (Després, 1996a) and in the end no students challenged union jobs. If teachers unions feel somehow threatened by business-education partnerships where students and/or business participants might involve a "union" job, then what is a mutually beneficial manner of rectifying the problem? This thesis approaches that question by starting with the basic perceptions of the participants as something to be shared and worked with.

Benevides commenting in a *Boston Business Journal* (1997) informs us that not all works in business-education partnerships as well as some businesses would perhaps like or expect, despite past claims of education amelioration. Benevides cites Roger Porter, director of the Center for Business and Government at Harvard University's John F. Kennedy School of Government, as stating: "Many of the most innovative things that are being done [in education] are being done by private entities." Benevides notes:

The education industry can be divided into three areas ripe for for-profit forays: schools, estimated to be worth \$16 billion in revenue a year; educational services, which brought in \$15.3 billion last year; and the largest segment, educational products, which generated revenue of \$21.2 billion last year, according to EduVentures...Nationwide, recent attempts by for-profits to run public schools have suffered highly publicized setbacks. Minneapolis-based Education Alternatives Inc. lost its contract to run all the schools in Hartford and several schools in Baltimore, and the New York-based Edison Project, run by Christopher Whittle, has been recast on a more modest scale. [Boston Business Journal]

The thrust of Benevides' point is that the driving force for some partnering, which I mentioned earlier, is the potential market it opens up to business.

One case example of business capitalizing on the education market involves a cold beverage supplier. I was able to obtain a memo from Bellevue School District one of the school districts in this dissertation—on the subject of its partnership arrangement with Guzzle Beverages where it turns out that the arrangement, or "sponsorship" as the special committee called it, was aimed at receiving additional funds in return for an exclusive contract. Regarding this exclusive contract territory a local school district trustee enticed his audience in a local newspaper to consider calls for more business-education partnering including "an exclusive arrangement with a cold beverage supplier" which would "provide additional funds at the school level where they serve the students' best interests" (Richmond News, 1998). But there was no indication how the money would "serve the students' best interests." As an exclusive arrangement with the cold beverage supplier the sponsorship made no claims or efforts towards enhancing student learning. It appears this partnership was merely a means of adding to education funding. Also, given the questionable health value of the arrangement, the committee's silence on the question of ethical practices and corresponding responsibility for students demonstrates a possible dilemma in education.

In another example, a different school district in which I worked entered into a sponsorship arrangement to have its telecommunications needs serviced exclusively through a single telecommunications conglomerate in exchange for a financial commitment by the company to the tune of one million dollars over a 10-year period. The agreement, labeled in a local newspaper and by the company as a partnership,

challenges some of the qualities of what is intended for business-education partnerships. For example, consider the company's (Bell West Inc.) news announcement on their website:

Randy Reynolds, President and CEO of Bell West Inc. noted that the new agreement is a positive one for both parties. "Bell is delighted to have entered into this *partnership*, *which will support both learning* and the arts in Surrey," said Mr. Reynolds. "This initiative is an extension of Bell's national support of the arts and cultural sector across Canada and a way for us to make a real and lasting contribution to the community at large and to youth in particular.

....School Board...Chair Mary Polak noted that the contribution made by Bell has enabled the District to realize a long-standing goal.

"To have a successful, highly-visible Canadian company like Bell behind the Centre is a tremendous boost to the development of arts and culture in our region," said Ms. Polak. "The District, like the Bell Canada group of companies, is committed to bringing the people of our community together though innovative projects. It is through the good corporate citizenship of sponsors like Bell that our dream for a professional theatre has become a reality." (2002: http://www.bell.ca/en/about/press/release/2002/pr-20020418.asp, and http://www.newswire.ca/releases/April2002/15/c4387.html; emphasis added)

The working definition of a partnership that I established at the beginning of this dissertation emphasizes the enhancement of student learning. In this case the enhancement of student learning has to be questioned. There are no indicated curricular support programs or how this sponsorship would aid students in their learning. One has to wonder if educational stakeholders are ready to compromise on ethical matters in order to receive money then is there a point to trying to halt business-education partnerships or severely question business' motives for partnering with education?

Boundaries of Business-Education Partnerships

No one goes further in capturing the assumed clash of systems when business goes to school than Boyles (1998). He emphasizes that his efforts are not "for an

overthrow of capitalism. [I am] arguing, instead, that the worst vestiges of capitalism, including most prominently consumer materialism, are being foisted upon teachers and students, through their schools (via a kind of befuddled acquiescence), at the expense of critical transitivity" (p. 5). 36 Here is the main dilemma of businesseducation partnerships, it would appear. Boyles, and likewise other critics of businesseducation partnerships such as Molnar (1996) or Robertson (1998, 1999), is concerned about the raw capitalist agenda of some businesses, in particular "consumer materialism," that drives those businesses to view education as a ready market ripe for exploitation, and all the while under the guise of partnerships. What is more, those businesses are able to pursue their course because of education's desperation for additional resources and stakeholders' ignorance of the systemic problems associated with business-education partnerships.

In education young people are a captive audience. Perceived as profitmongers, for example by some educators that I interviewed, business is castigated—rightly or wrongly—in a shroud of self-interest. Interest groups have listed ethical guidelines as one means of ensuring that students are not harmed in any way by business involvement in education (see M. R. Bloom, 1995; Canadian Teachers Federation, 1997, 2000; Ekelund, 1993). In its efforts to heighten the awareness of proper conduct in education partnerships, the Conference Board of Canada (M. R. Bloom, 1997) offers "Operating Principles for Business-Education Partnerships" along with "Ethical Guidelines for Business-Education Partnerships." What interests me about that is the implication that education deserves a special consideration of

³⁶ By "critical transivity" he means that the interplay of student-teacher discussions is compromised.

conduct, recognition perhaps that education is a near sacrosanct institution insofar as possible business exploitation is concerned (also Raelin, 1985; Stern, Stone, Hopkins, McMillion & Crain, 1994).

Molnar (1996), in his study of business involvement in schools, questions business' ethical responsibility to the community, wondering, for example, about the propriety of McDonald's involvement in a fire-prevention campaign where coupons for burgers were given out to children. He asks, "why try to save children from burning to death by encouraging them to eat a product filled with saturated fat that the school's own nutrition curriculum would tell them to avoid" (p. 26)? Harty (1979) cites numerous examples of corporations bending, or blatantly ignoring, ethical rightness with education. Business-education partnerships continue to exist in the form of door-to-door sales of chocolate bars, savings coupon books, candles or spices, for example. An ethical question that is not examined in the literature regarding these partnerships concerns the line between child labor and enlisting (insisting on?) children's participation in education, or school, fund raising to supplement funding for band, travel or sports.

Resistance to Business-Education Partnerships

Formal education is an exclusive domain whose restrictions are delineated by conferred credentials (university degrees) predetermined by an external organization or bureaucracy (teachers college or department of education, local union). The functional jurisdiction of the teacher is a classroom, which is off limits to outsiders (D. Hargreaves, 1995; Hodas, 1996). That makes for conflict when community members (e.g., business) attempt to become more involved in the educational process, whether in assisting educators in the routine of teaching and managing young

people or collaborating on curricular components. Although this information complements our knowledge of the culture of education, it does not help to explain why educators resist outsiders' input in education.

In a national survey reported by Manders (1987), teachers' perceptions of business include suspicion that business acts with only superficial interest in the needs of education, seeking to "improve corporate public relations or image" and is "condescending" toward education sometimes (p. 32). Teachers in this survey also wondered about business-education partnerships, specifically about the purposes of partnering with business, although "teachers with experience in partnerships with business reported positive results" (p. 32). The implication is that educators who have experience with partnerships are less likely to be resistant to them. No distinction was made about the type of business or the type of partnership.

In addition to the suspicions about partnership purposes, Marshall and Tucker (1992) note: "Educators are deeply skeptical of the idea that education has anything of value to learn from business," due in part to the seemingly incommensurability of business concepts such as "product," "customers" or "quality" (p. 118). Questions of purpose and the seeming divergence of terms used are key reasons suggested for educators' resistance. Contenta (1993) mentions other factors regarding change and resistance in education:

Our natural tendency to retreat in the face of change is reinforced by a nostalgia for a simpler time and a refusal to look beyond the mythologies that blind us. As our fear of change grows, we pressure schools to preserve a culture that's busy charting its own ruin. The economy becomes the main concern, not only because profits keep business happy and re-elect governments, but also because the economy has for centuries served as the litmus test for quality of life. And so, in looking forward and falling back, we bombard schools with mixed messages while beefing up the hidden

curriculum. In the end, the status quo and its blinding mythology of economic progress are reinforced. (p. 191)

Hodas (1996) associates the problem of this resistance with the institution and culture of education, as do Howley and Howley (1995).³⁷ Other researchers on teachers and education have reached similar conclusions (McIntyre & O'Hair, 1996; Simmons & Pitman, 1994).

Cuban (1984), a researcher in educational change at Stanford University, found that teachers tend to continue their age-worn practices because the "occupational ethos of teaching...breeds conservatism and resistance to change in institutional practice. This conservatism, i.e., preference for stability and caution toward change, is rooted in the people recruited into the profession, how they are informally socialized, and the school culture of which teaching itself is a primary ingredient" (p. 243). And as Robertson (1998) stated in her denigration of consultant-would-be-pundits of educational change: "Their weary audiences [teachers] return to their classrooms the next day, where things remain pretty much the same" (p. 31; see also p. 128). To alter performance requires some reflecting and questioning, whether individually practiced (Grimmett, 1988; Louden, 1991; Osguthorpe, Harris, Harris, & Black, 1995; Robinson, 1994; Schön, 1983; Zehm & Kottler, 1995), or as part of a collaborative development (Cleft, Veal, Holland, Johnson and McCarthy, 1995; McLean, 1991). It would appear by and large that the culture of education is not one

³⁷ Howley and Howley (1995) draw upon other sources to conclude that teachers who stay in the job actually stagnate intellectually compared to their peers in other jobs and professions. Lack of education about issues may very well play a part in the attitude of resistance and possible malaise towards outsiders.

that necessarily fosters reflection or alteration (Cuban, 1984; Després, 1999, 1994; Gibbons, 1990; Lowe, 1997).

Contenta (1993) suggests that educators actually thwart reform attempts, citing an example drawn from a situation in Ontario, Canada, in the late 1980s. The Ontario Ministry of Education wanted to implement a curriculum of subject integration. Contenta notes: "High school teachers protective of their subject areas fought hard against the idea, and by 1993 it seemed the government was ready to back down and keep the artificial disciplines" (p. 190). He contends:

No schooling reform would be complete without a built-in contradiction...[The Ministry of Education] began to produce a set of standards that students must meet at various grade levels. Some educators fear that teachers will be forced to spoon-feed content to meet those standards. Once a standard is set, tests are needed to evaluate whether students have reached them. The more you test, the easier it becomes to sort, and the hidden curriculum loves to sort. (p. 190)

The preceding points help to clarify educational resistance. Of little help to educators, however, are calls to deliberately resist corporations because they are corporations or because they have amassed presence. For example, Robertson (1998) quotes

Theodore Roszak as urging everyone to "find out what Bill Gates wants your school to do. Don't do that" (p. 196), as if other corporations or individuals are better predisposed to the interests of education and as if educators understand well the reasons for doing so. Resistance is also understandable, though not justified, by virtue of the systemic structure of education (Cuban, 1984; Gibbons, 1991, 1990, 1976; D. Hargreaves, 1995; Hodas, 1996; Welker, 1992). According to Lowe (1997), who wrote about schooling and change, the erosion of teacher confidence and the growth of teachers on the defensive have resulted from the removal of teachers from curriculum control.

Conclusion

This chapter set out to examine the literature on business, education and business-education partnerships in order to provide one backdrop for analyzing educators' and businesspersons' perceptions of business-education partnerships. This review, drawn as it is along systemic lines, enables a more complete view of what is entailed in business and education partnering together. The rise of business-education partnerships that extend beyond the level of material resources is becoming increasingly visible as public funding of education is reduced still further and in the face of open challenges to the community and education (Price, 1992). But it remains unfortunate if these partnerships develop merely out of economic necessity or acquiescence out of economic desperation rather than from mutual and educated decision making about what is ultimately best for the learner. That said, it is not surprising when partnerships develop as a function of economics. With this in mind the value of business-education partnerships is potentially a matter of contestation.

Ultimately the purposes of education are not a uniform or universal set of guiding principles that could direct educators or business in their dealing with education. On the other hand, if educators fear "distorted goals" for "corporate gain," perhaps this is the dawning of a new set of educational purposes to which educators will need to become accustomed. What does society want from education? Will business determine the new educational purposes by default?

The hidden curriculum, the formal structure of schooling, the architectural environment of educational institutions, and the Tayloristic management structure all play a part in the acculturation of youth into Western society (Contenta, 1993;

Eggleston, 1992; Gibbons, 1990; Macmillan, 1998; Marshall & Tucker, 1992). The many purposes of education include preparing students for eventual inclusion in the workforce, or as a contributing member of society, developing lifelong learning skills, and even learning for its own sake (Schweitzer, Crocker & Gilliss, 1995).

Despite an array of viewpoints on business-education partnerships, there is no consensus of opinion on what the purpose of these partnerships should be or how one could gauge success. What is problematic with the Conference Board's (M. R. Bloom, 1997) partnership definition as "enhanced student learning" is its vaqueness. What constitutes "enhanced"? If an outdated computer is replaced with a more current one, does that equate with "enhanced student learning"? If Guzzle Beverages offers X dollars to a local school district's coffers for their discretion, should there be an ethics review to ensure proper motives by the participants for partnering? Do increased test scores mean enhanced student learning and correlate to business-education partnerships? The absence of concrete steps to ensure meaningful learning enhancements is a systemic problem that is not solved either by tighter business or government controls on education, or by ethical guidelines of partnerships. Principles, guiding questions, and ethical guidelines, such as those established by the Conference Board of Canada, Toronto School Board, or the Centre for Education and Industry at the University of Warwick, UK,³⁸ may help partnerships to become established or even to flourish for a time, and certainly provide educators and business persons with an alpha point for beginning to contemplate partnering.

³⁸ Each of these organizations offers online information to stakeholders who are contemplating or involved in a partnership. The Conference Board's website has several documents available regarding ethical and practical principles of partnering, for example.

Missing is any mention of, let alone a guide to, a systemic understanding of education and business. The range of articulated and perceived educational purposes varies among and between business and education stakeholders making the dialogue on partnerships very difficult. On top of this are other systemic factors that render the discussion of educational reform and business-education partnerships a complex *mêlée*.

One conclusion we can draw from the information in this chapter up to this point is that business-education partnerships are complex both because partnerships are comprised of the systems of business and education, and because of the variety of types of arrangements possible between the two systems, which I discussed in Chapter One. Add to this the perceptions of the participants and stakeholders of business-education partnerships along with expectations put on these partnerships and that complexity is compounded.

Business-education partnerships suffer many problems and demand a more comprehensive approach to analyzing these problems and the perceptions of the people involved and affected by them. Systemic thinking is such a comprehensive means of understanding the complexity of business-education partnerships and their problems. In my analysis of the data, and as I briefly explained earlier in this dissertation, systemic thinking is the practice of viewing events or organizations (any thing) as interconnected to other events or organizations. Broadening our perspective on a system, such as business-education partnerships, allows for more significant factors to be considered. The interconnectedness of factors and their interplay provides an array of possibilities of questions, problems, solutions and directions not as readily available (if at all) by other means. This application of

systemic thinking to the study of perceptions of business-education partnerships ensures a systemic response to a complex organization.

The categories presented in this chapter represent a cross section of many of the key systemic factors in the discussion of business-education partnerships. The significance of presenting a review of the literature in these categories is to show the divergence of opinions about education and about business-education partnerships. What is evident from the literature is the lack of consensus on the problems in education and partnerships, and perhaps more importantly the perceptions of business and education in partnership. In fact it seems that no one has a solid grip on the problems in education or in partnerships. A partnership arrangement between business and education, or between groups of any systems, is more than an agreement to collaborate on something in exchange for funding for education, just as the problems with business-education partnerships are more than exercises of "crass commercialism" (Boyles, 1998).

As I have been pointing out throughout this chapter business-education partnerships are highly complex systems demanding a protocol that better appreciates this complexity and that is able to achieve a successful decision leading to a successful partnership or its cessation. Business-education partnerships will continue past different "waves" (Ashwell & Caropreso, 1989), some in the first or second and others in the third, fourth or fifth, because the breakdowns and problems in partnering point to a failure to accommodate the significance of the systemic factors in partnerships, an important one of which is the role of the participants' perceptions in initiating partnerships and that are carried into partnerships with them. A critical factor in this protocol for partnering is to better

understand the participants' and stakeholders' perceptions of business-education partnerships, because these perceptions and attitudes have been assumed or ignored rather than assessed and analyzed. These perceptions form a potential starting point for an educational exchange among participants.

In the remaining chapters I analyze the perceptions of business, educators and students in order both to map the thinking in the fields of business and education, and to develop a more informed and systemic approach to business-education partnerships.

PARTICIPANTS' PERCEPTIONS OF BUSINESS

For those of us who deal with these changes daily [in technology and commerce], the pace is simply dizzying. (Clendenin, 1989, p. 7)

Two value systems arose and persist—the ethos of success and the ethos of conviction. The aims and objectives of business capitalism—size, power, profit, market share and wealth—are driven by the ethos of success. All the "virtues" of this world—neighborliness, familiarity, faith, hope, justice, charity, fortitude—are vested in the ethos of conviction. Its weakness is that none of these makes money. (Alexander, 1997, p. 71)

From the quotations above there are radical differences between business and education. In this short chapter I examine how the interviewees perceive the nature or culture of business based on the participants' responses to the third set of questions in the Interview Schedule, "understandings of the culture of business" (see Appendix 2). Many of the participants' reflections on the workplace are also suited to this chapter, but for the sake of organization and clarity I will discuss them in Chapter Five. I have divided up the three groups of interviewees in order to analyze their responses to the interview questions. As with the remaining chapters dealing with the data and analysis, sections vary in length. These differences have to do with the data and do not imply particular importance of topics. Thus, shorter sections are such because either the data has many similar responses or there is little to report. The thematic headings that I found helpful in organizing the data and analyses are business nature and business expectations. I have grouped the final analysis of the participants' responses under the appropriate systemic cluster headings as a means of further clarifying meanings and the relationships between the data and the literature. The interview questions were:

- 1) What is the nature of business in your understanding? In other words, what are your perceptions about business?
- 2) How do you substantiate your understanding or perceptions?
- 3) What metaphor would you use to describe business?
- 4) Is there consistency, or alignment, between school and the business culture, or is there tension? Where does the consistency or tension lie?
 Recall from Chapter One the list of participants were as follows (see Table 1 in

Chapter One for details):

Participant	Represents:
Don, Corporate Administration	Business
(Larson-Simpson Technologies)	
Greg (SkyHigh Airlines)	Business
Mike (SkyHigh Airlines)	Business
Jens (Makschift Engineering)	Business
Dawn (Knowledge Architecture)	Business
Kevin (Mason Good)	Business
Chantal (Gulliver's Travel)	Business
Karen (SportShoe Canada Ltd.)	Business
Bob (Learning Society)	Business
Bill	- Superintendent
Aaron	- Leadership and management in the school
Al	- IT instruction, ITM, leadership in the
	department
Colin	- Research and direction
Robin	- Teaches business education, Career and
A STATE OF THE STA	Personal Planning, liaise with businesses in
the state of the s	community
Kris	- Teaches ESL, photography
Ralph	- Teaches IT, school administration
Blair	- Teaches avionics, shop, liaise with SkyHigh
	Airlines
Leslie	- Teaches IT
Carrie	- Teaches home economics, hospitality, liaise
	with Chantal of Gulliver's Travel
Eunice	- Teacher Teaches social studies
Matt	- Teaches sciences
Ferdinand	- Teaches IT

Otto	- University researcher and teacher-on-call
Dave	- Student
Huang	- Student
Frank	- Student
Steve	- Student
Jason	- Student
Henry	- Student
Gordie	- Student
Nicol	- Student
Karl	- Student
Annika	- Student
RJ	- Student
Raj	- Student
12 students ³⁹	- Student

The Nature of Business

Business and commerce have held a significant place in cultures even longer than formal education has. My working definition of "business," derived from the interviews and from my understanding of the literature, is as follows: business is the exchange of goods or services between people for a determined value, usually in the form of other services or goods, such as money or valued objects.

Business' Perceptions of the Nature of Business

Business perceptions of the nature of business in this study were all similar. For example, according to Mike (B)⁴⁰ the nature of business is "service, to make a profit; you don't make a profit, you don't hire more people," a point that was also made by Don (B). What this idea suggests, I think, is that beyond the interest in profit, business has an implicit concern with providing people with work. When a business fails to

³⁹ This group of students was interviewed *en masse*. It was a younger grade and did not provide data that added to or took away from the other subjects.

⁴⁰ Recall from Chapter One the designations in parentheses refer to business representatives (B), educators (E) and students (S) who participated in this study.

make a profit, there is a corresponding and consequential impact on the availability of jobs. Jobless members of society are limited in their purchasing power, which in turn has a corresponding and consequential impact again on business. This contribution to people's livelihood, dependent on service and profit, is but one consequence of business—but a vital one when it comes to the future of students.

A second point about business that came up is the competitive nature of business. Bob (B) believed: "[The] business environment is highly predatory. There's no getting away from that. Education...isn't. The gap is there." Bob explained that the competition element of business "applies...whether you're competing in the market with another company or you're competing in a workplace for your job." Businesses compete for resources and profits, and employees compete for positions. As Don (B) unabashedly explained: "It's the key to existing in this society. You have to have a job and you need businesses to have jobs." Obviously Don sees business as critical to people's very survival, to their ability to find work and thus their basic ability to "exist." It follows, therefore, that something as central to the values of business people should also be central to the form of a partnership between business and education. The business people participating in this study clearly think of business as a vital, demanding, and rational activity both in and for a society. There may even be reason to consider whether such a value is critical to the educational system that aims to prepare students for life, and such questions could well be expected to arise within the scope of business-education partnerships.

An implied difference between business and education that Don (B) makes about the nature of business is that, "in business we have a very clear focus, we have a very clear plan to get to that focus. Management by objectives and results is a big

thing at [Larson-Simpson Technologies]." Evidently, there are systemic procedures practiced by business that may or may not be practiced in schools.

Educators' Perceptions of the Nature of Business

Educators' views of the nature of business were similar to the business viewpoints on a basic level, but quickly diverged when it came to the very purpose of business. Blair (E) expressed views similar to the business people about the nature of business: "Business is competition. They're profit-oriented. We live in a capitalistic society." Instead of seeing it as vital to life as a whole, Blair sees the business as a particular ideological approach, driven by competition and profit, in accord with the governing ethos of capitalism. Aaron (E) expressed a similar idea. He said that business "is all about money...greed. [With] every major business their main thing is to make money or profit. The more money you make the more successful you are."

Carrie (E), who co-taught a component of her course with Chantal (B), agreed with Blair (E) and Aaron (E), equating business with "kind of a money making machine." Kris (E), who also ran his own business outside of school, said: "Sell and buy, sell and buy, [and] provide a service." These educators are distancing themselves and their work from their view of business in its most base form, which is all about making money. Still, Kris does make reference to business providing a service. Or as Blair put it, "bottom line: we're [parents] trying to buy our kids skates." Even though Blair uses a somewhat trivial example (forgive me hockey players and figure skaters) to indicate the interdependent relationship of business and society he is granting business a necessary role. Carrie, in accord, stated: "The nature of business is to make money and I think that whatever they have to sell, [they would find] the best way in which to market that, sell it and turn over a profit."

In the sets of perceptions above it is evident that the respondents' views of business focus primarily on profit making, not necessarily as an evil, but merely as a given in the nature of business. None of the participants contest this point although at a certain level—as we will see in the next chapters—business profiting from education raises some concerns for some stakeholders.

I asked Carrie (E) to substantiate her perception of business practices. She shared this glimpse into her past, which shows much more sympathy for, and understanding of, business' viewpoint than was typically expressed among the educators in my sample:

I guess because my father had his own company, and watching and seeing what the bottom line was as far as the end of the year, and watching him pacing the floor when it was difficult for him to meet the payroll. I've also seen when things were good, the material things, benefits from it. And the bottom line was to acquire work and, I feel in his situation, to take great pride in the fact that he was a successful businessman. I don't think necessarily for him that it was just the dollar but he was respected and there was integrity, and those are important. Those are things that I have viewed from his situation, but I think when you have employees to deal with you have to make sure that their needs are taken care of, too, and that is usually in the financial. A paycheque has to be there at the end of the month.

Carrie's snapshot of business as a first-hand observer helps to clarify both the human element in business and some of its systemic structure. It is especially worth noting that her first reflections on business lacked any sense of connection with business' efforts to seek only profit. And yet a connection emerged with great vividness once she explored her ideas in greater depth, realizing that there were some systemic elements evident in business that obviously appeared in education as well, such as a paycheque, material benefits, work.

I then asked Carrie (E) if it is fair to say that teachers work to "make money" just as businesspersons do. She replied: "I don't think you go into teaching thinking

that you are going to be making a lot of money at it. So again, my view is that business is there to make money and that is their bottom line...[T]he value I would get from [teaching] would be the satisfaction of knowing that I have done a really good job." Here you can see, with Carrie's reflections, how some understanding of business as a potential partner with education is well within an educator's grasp, based as it is in this instance on personal experience. Other possible points of convergence may be found in her mention of job satisfaction.

Leslie (E) believed that business has its educational side to it, and that, as such, education is about preparing students for lifelong learning. She drew upon her knowledge of IT workers, such as her husband, "[who] need to take courses all the time, so they're always upgrading because [the IT field] is rapidly changing. And for them to keep up with their colleagues, they have to take courses every year." Education, which does not stop at the end of high school, forms a critical factor in staying competitive and knowledgeable about the job.

Students' Perceptions of the Nature of Business

In the responses of participating students there appeared to be no differences of opinion from the preceding sections about the nature of business. Huang (S) believed business exists "to earn money." Frank (S) spoke of "developing products, services." Their perceptions echoed those of the teachers. On the other hand, Steve (S) referred to business in terms of a complete cycle of "different components: harvesting raw materials, manufacturing, processing, and finally, sale." He added, "[it's] almost like the cycle of nature: You need certain aspects of it to work together to keep going." What initially sounded like a textbook definition to me actually is a basic understanding of business as a complex system.

The point is made somewhat ironically by Jason (S), who described business as "supposedly this horrible place where everybody works, you know, 50 hour weeks, and to come home, you're tired, stressed out, lives horrible, and nobody cares about you." Expressed here at least is a sense of business as hard work, otherwise missing from the responses of other student participants. At the same time Jason balances this view with the additional comment that "[you] also hear good stories about how people make their own way." His perspective of, really, the workplace with his sense of the drudgery and possibility provides a fuller sense of what business is about and that could be a point of convergence between education and business.

Final Analysis

Systemic Factors in Business' Purpose

Respondents saw an immediate connection between business' profitability and its role as employer. By focusing on business's profit fixation, without crediting the employment contribution, educators are reducing the likelihood of being able to enter into a productive, respectful partnership or dialogue with business people. When a business fails to make a profit, there is a corresponding and consequential impact on available jobs. Educators certainly are not educating the young for anything but full participation in society, and that would include a wide range of employment opportunities, rather than being limited to the non-profit and government sectors. Without jobs, most members of society are limited in their purchasing power, which in turn has a consequential impact on business. This practical economic factor cannot help but have repercussions for education.

One place where educators and business people might turn to in search of a common ground is the United Nations (2002; see also UNESCO, 2002) through its

business-related committees. The UN's "Civil Society/Business" link leads to a web page with the following quotation from Kofi Annan, UN Secretary-General: "Thriving markets and human security go hand in hand; without one, we will not have the other" (http://www.un.org/partners/business/index.html). From Annan's statement it appears that business is viewed as the-trucial link in ensuring peace (security) in other areas of human activity. Although education would be instrumental in understanding the business and security connections and processes, it is not viewed as the critical means. Having said that, the UNESCO (2002) website specifically indicates the need for social partnerships with business. In the response to the general question about why this move to partnering, the website indicates:

The complexity of globalization requires outreach to partners, both new and established, whose expertise will help share the benefits of this phenomenon on a more equitable basis amongst all countries and their citizens.

Moreover, the challenges presented by the Knowledge Society depend on key strategic alliances. These must include outreach to the Business sector since this is a major stakeholder in the development dynamic. (http://www.unesco.org/ncp/partners)

This stands as a bold challenge to the typical perception of business by educators. If education and business are able to dialogue reasonably about how they can and do work together to improve society then they have grounds for partnering together for a greater good not only in the local community but also on a global scale. For certain, the easily overlooked elements of a fuller understanding of systemic factors, which lie within reach of the opinions expressed in the interviews, are critical to any meaningful development of, and dialogue about, business-education partnerships. They were present in the discussion of business and they will become all the more evident when I turn to the participants' perspectives on the nature of education.

Consider, for example, how Carrie (E), in discussing the business dealings of her father, provided the only mention of "integrity" in these reflections on business. A consideration in bringing business and education people together may be the practice of integrity. Unless there is just such a sense of the integrity of each partner's work (whether the word "integrity" is used for it or not), the respect and trust necessary for a successful partnership or even the initial stages of dialogue about partnering possibilities, will be difficult if not impossible to establish.

From the perceptions of the participants business' purposes include profitmaking, predatory practice and employer. Some of the outcomes would be economic builder and sustainer, determiner of workplace needs and change agent. All these factors are intrinsically linked to the way business operates, or its structure.

Systemic Factors in Business' Structure

Education is a continuum in human lives between formal education and life after school including in the workplace, a point implied or stated by the business participants and mentioned by Leslie (E), for example. Similarly Jason's (S) perception of the workplace and personal effort depicts both the generalities of life in the workplace and the balanced possible good that can and does arise from people who labor for their goals. Here is the other side of business, as something more than greed and gain, which certainly points to how initial, impersonal and general impressions of the partner's intent and nature need to be overcome with a deeper understanding, grounded in a more systemic approach to the business-education partnership discussion.

Conclusion

If business-education partnerships are to experience some degree of success, the perceived divergences between the two partners will need to be acknowledged and explored by the participants. It may mean digging down into personal experiences—as Carrie (E) did—or thinking about how one's own economic position might affect one's perceptions and working productively within those divergent perspectives, even as those viewpoints could well be altered as a result of partnering together and discussing these very issues.

PARTICIPANTS' PERCEPTIONS OF EDUCATION

There has always been a link between education and the outside world, in that educational organizations, often without being aware of it, strongly reflect the general non-collaborative, hierarchical culture of society. (Jones, 1992, p. 257)

This chapter explores the interviewees' perceptions of the nature of education.

The participants were asked the following questions:

- 1) What is the nature of education in your understanding? In other words, what are your perceptions of education?
- 2) How do you substantiate your understanding or perceptions?
- 3) What metaphor would you use to describe education?
- 4) What is your response to the suggestion that teachers are in the "business" of schooling and resist external commentaries, direction or expertise especially from business? If you are in agreement, why do you think this is? If not, please provide further clarification.
- 5) Is there consistency, or alignment, between school and the business culture, or is there tension? Where does the consistency or tension lie?

As with Chapter Three, I have divided up the three groups of interviewees to provide their responses to these questions under thematic headings followed by an analysis section that delves further into the responses of the participants. Recall from Chapter One the list of participants were as follows (see Table 1 in Chapter One for details):

Participant	Represents:
Don, Corporate Administration	Business
(Larson-Simpson Technologies)	
Greg (SkyHigh Airlines)	Business

Mike (SkyHigh Airlines)	Business
Jens (Makschift Engineering)	Business
Dawn (Knowledge Architecture)	Business
Kevin (Mason Good)	Business
Chantal (Gulliver's Travel)	Business
Karen (SportShoe Canada Ltd.)	Business
Bob (Learning Society)	Business
Bill	- Superintendent
Aaron	- Leadership and management in the school
Al	- IT instruction, ITM, leadership in the
ing di a comunication de Calculation	department
Colin	- Research and direction
Robin	- Teaches business education, Career and
	Personal Planning, liaise with businesses in
	community
Kris	- Teaches ESL, photography
Ralph	- Teaches IT, school administration
Blair	- Teaches avionics, shop, liaise with SkyHigh
	Airlines
Leslie	- Teaches IT
Carrie	- Teaches home economics, hospitality, liaise
	with Chantal of Gulliver's Travel
Eunice	- Teaches social studies
Matt	- Teaches sciences
Ferdinand	- Teaches IT
Otto	- University researcher and teacher-on-call
Dave	- Student
Huang	- Student
Frank	- Student
Steve	- Student
Jason	- Student
Henry	- Student
Gordie	- Student
Nicol	- Student
Karl	- Student
Annika	- Student
<i>RI</i>	Student - Student
Raj	- Student
12 students ⁴¹	- Student

⁴¹ This group of students was interviewed *en masse*. It was a younger grade and did not provide data that added to or take away from the other subjects.

The Nature of Education

Businesss' Perceptions of the Nature of Education

Bob (B) thought the nature of education was about "collaboration [and] personal development. I was amazed, [he said] when I started making visits to classrooms over the past year, particularly in the senior grades, [at] the degree to which teamwork is now really part of the classroom experience." In seeming agreement, Mike (B), along with Greg (B), believed that the fundamental purpose of education was to "supply knowledge [and] life skills." Other businesspersons interviewed touched on similar values. Bob continued with a comment that takes us into the mechanics or systemic structure of education. He observed: "The stand-and-deliver approach of the talking head droning to 30 kids, it just isn't there any more. That's a good thing. Challenging mind you." In some classrooms that Bob visited, curriculum delivery has changed which he praises. There is an implicit challenge to those educators who still practice the "stand-and-deliver" approach to teaching.

Bob (B) also made an interesting observation about the differences between business and education. He claimed, "the essence [of education] is more on the personal development side compared to business where it's more predatory [and] competitive. I'm not saying that in a critical sense; that's just the reality." This idea of business as a competitive system because it seeks profit and market dominance is part of its nature, which we read about in Chapter Two. Note that this is not a condemnation by Bob. Neither did the other interviewees from business denigrate business for its ethos of success, or drive for increased "bottom line." By contrast, the nature of education is somehow "softer." It is as if the educational mandate is a kind of rounding out the whole person as part of social preparation, which Bob admits.

He said: "If as the Mission Statement of the [BC] Ministry of Education identifies that part of the role of education is to prepare students for citizenship, then putting them on these game farms [i.e., schools] that are isolated from the main stream of the community is the farthest thing from preparing for citizenship." On the one hand Bob tells us that schools have changed for the better. On the other hand he criticizes schools as inhumane institutions that do not fit into the society that has put them there. This offers a potential point of divergence point between business and education. The literature, by the same token, provides a number of corroborating views about the institution, which we saw in Chapter Two.

Don (B), similar to Bob (B), focused on a related structural element, the educational environment, but from a different angle. He noted, "[Teachers] are faced with an absolutely enormous challenge because of the change in the moral standards in the world, the change in the environment, the change in technology. There's nothing firm now as far as the family is concerned, and they've [i.e., educators] got a major struggle." This observation is important in the discussion of education (and partnerships), because, with the world as it is, according to Don, education is in a struggle to accommodate many changes. In appreciating those systemic factors and their elements, business, along with the rest of society, has an opportunity to come along side education as a co-laborer in the acculturation and education of children.

Don (B), similar to other participants interviewed, also suggested that formal education, "should produce students with a very wide understanding of the world around us, and hopefully some depth that can help them integrate into society and into business." In other words, we school in personal development and knowledge

and somehow in that process of development and knowledge-building students will manage "some depth" of transferable skills and develop abilities necessary for social life and productivity in the workplace. The slight offset from other business participants here is in Don's claim that schools *should* be places of preparation, implying that currently they are not. In all, business was in agreement that the nature of education was about preparation for life, including for work.

Educators' Perceptions of the Nature of Education

Robin (E) gave the following depiction of the nature of education:

The pat curriculums are really, really tight with a lot of information and so I think in there, there is a legal obligation to look at the curriculum and try to follow the curriculum. So, when people look at that they are overwhelmed...not only by this huge wealth of information, this huge bank of information, but when they get to the classrooms they see the diversity of classes, and the microcosm of all the social issues that are going on in our society and all the dysfuntionality that all the kids are coming to school with. All the issues are there in classrooms. People are just bent trying to get through their curriculums, sticking your heads above the water, seeing the rapid change around you and try to weave that into your curriculum. It is a daunting task.

Robin has some valuable points about the structure of education. For educators the "legal obligation" to follow the curriculum is a convincing factor that drives much of education. Coupled with the responsibility and material of this curriculum are the systemic elements of school, such as students, student culture, classrooms, and even social factors outside school. In many respects education is a "daunting task."

On the other hand, Otto (E) was an educator profoundly concerned about the current failures of education caused by its very disconnection to a larger world:

What is the nature of education or what <u>should be</u> the nature of education? Basically it's keeping kids off the street, babysitting them, giving them things to do that we shouldn't be giving them to do, and things they're obviously not interested in because they're a little more intelligent than we think, incorporating them into the dominant, sort of upper-middle class kind of

values of society, taking away most of the creativity, and initiative and critical perspectives that they might have, and questioning out of them, making them these bland people in the end who know how to behave, basically do very little beyond that. What should education be? Well, everything that it is not. It should be a place where people come to ask questions of themselves, of each other, where they get answers to some degree, not just from teachers. Let's bring social workers, let's bring lawyers, let's bring anybody in to talk about things. It should be totally not disconnected from life as it is.

Both Otto and Robin's (E) comments touch on the acculturation of youth in society as well as a mitigating purpose of education: inculcating the "dominant, sort of upper-middle class kind of values of society." In both cases education is seen as a preparation ground for life, in a questioning and connected way. Otto adds the additional consideration of "ought," or what education could be. This additional reflection demands an effort from educators as well as community—not just business—as together they "talk about things" in life and how "life as it is" could play a part in education.

Systemic factors, such as social elements, weigh on education in many areas, including those mentioned by Robin (E) and Otto (E) and which Eunice (E) and Matt (E), for example, also pick up. Leslie (E), pointing to some factors mentioned by Otto, admitted: "With some students, it's a baby-sitting service, but with the majority of students, they're actually learning something. Some of them really have a mature level of what this is going to help [them] with [their] future." Nevertheless, Leslie used a gardening metaphor, "plant your seeds, watch them grow," to express her view of the nature of education, a convergent point with the acculturation process of education.

Aaron (E) saw education economically as, "all about training to get money."

Blair (E) also made an economic link between education and the workforce. He

stated: "Our job is to inform kids what the job industry is like." Then he added: "We're training students for life after school. What we're training the kids to do is we're training kids to learn. We should be giving them the ability to learn and along the way they're going to get their basic skills, they're going to get those basic A, B, C's, basic 1+1. And yes, when they get into their senior year it's going to be very sophisticated learning." Blair continued with an example to impress his point about learning: "That's why a lot of these companies want a degree. If you apply to SkyHigh as a pilot, they want you to have your flight training but they also want you to have a degree. The reason why they want you to have a degree is it demonstrates the fact that you are capable of learning." This broader expectation of education outcomes speaks to education purposes that converge with both the perceptions expressed by business interviewed in this study and by education.

Kris (E) saw the nature of education as a near business practice. He explained: "In the strictest sense, our goal is to provide a service to the customer, which is the student." Kris continued to use business descriptions throughout his interview. Carrie (E) also made a business-education connection and believed, contrary to other educators, that there was no great difference between education and business, "except that where my students are concerned it isn't the money they are trying to achieve but, I hope, that it is satisfaction in whatever they are trying to produce, whether it be in an essay...but just taking pride and giving 100% on it."

Carrie (E) offered a reflection on her educational experience that helps us to understand another facet of the system of education. She explained: "I have taught for so long and it is so structured in school. We come in the morning, we move to the bell, and we only have this much time for lunch, and that is all the time we have. And

then if we leave the school we have to tell [the administration] where we are going." Certainly Kris' (E) perceptions have some convergence with Carrie's views. He shared with me some of his frustrations in his experiences in education, having gotten back into teaching after a brief hiatus overseas during which time he ran his own business. He felt that schooling was "a repetitive quicksand. It just bogs down. There are so many structures here that are pointless...and then other structures that are in the right direction but are in name only without the real effort." The systemic structure of education has features of perceived little or no value to the systemic purposes and form/design of education. Points like this one are critical in the discussion of education, especially in educational reform.

Along with the diagnosis of the structure of schooling Carrie (E) provided another thought that touched on areas of expertise: "Even [one's] credentials: very few people on staff would even know what degrees I had. That isn't something that is focused on." Her point about credentials implied a failure in business to recognize the educator's expertise, as a basic qualification for the job of teaching. Yet she enjoyed attending a business breakfast with Chantal (B), her business partner, and felt that being able to bring the common currency of a business card to that table, something teachers do not normally possess, was a step in gaining recognition within this partnership.

Carrie (E) went on to reflect on her partnership experience with Chantal (B): "We talk about all kinds of issues within the business world, obviously more focused on tourism and stuff I have learned from that. It is more like a practical kind of component as opposed to reading about it in a book or taking a night school course where, again, I am back in a classroom and somebody is standing at the front and

instructing us." To pick up on the restrictions she mentioned earlier, we can see that Carrie gained a kind of professional development and enlightenment about business issues, which she was able to develop through her partnership with Chantal. At the same time there is an implied distaste for the stand-and-deliver style of instruction especially in comparison with the lively interaction with Chantal. The points of divergence here range from learning styles and teaching approaches, to challenges of lifelong learning.

Another caustic viewpoint came from Blair (E) who described the nature of education metaphorically as a "welfare state." He explained: "You've got somebody who's always being funded from the top down. [Teachers] always relied on that money coming in; we have no need to change because we know every year there's going to be more money coming in." He was quick to add that teachers were, in fact, "producing something here" and that although he meant no disrespect to education, he asked rhetorically, "but what's the motive to change? There is no motive to change because that money is always coming there. So, if you continue to do what you had done in 1967, what is the motive to change? Why should I?" And regarding preparation for extra work or participation in extra-curricular activities, he surmised: "I'm not going to get any extra money for it. Sometimes satisfaction is not enough." Blair offered no solution to this problem of anti-motivation and educational stasis. His is a point that converges with few educators but certainly with some of the research findings on teachers and teaching.

Otto (E) expressed concern about the nature of education as a mere acculturation agency. He was convinced that education is about

preparing [students] for life and part of it is work, definitely! But to think that all of education is to ensure that people can get jobs, no. I think the role of education would be for them to understand what jobs are available perhaps, but not jobs, not even professions, just to be able to think about what jobs they're interested in and why; why are there particular jobs available and what are they demanding of me, and what is a workplace, and what do I want of a workplace rather than this rat race of just getting a job and getting a paycheque, and doing those kinds of things and working like workaholics.

Otto approaches, but never mentions, the complexity of either system of education or business. However his reflective exploration provides possibilities for dialogue between the two systems especially in the area of educational purposes. Otto takes the discussion into purposes and believes that rather than examine jobs or industry, the student should be engaged in a kind of research that would shed more light on their interests and the availability of jobs in their interest areas. But more importantly is delving into the purposes of those jobs and interests and the corresponding demands those jobs place on people.

In the nature of education are problems of educational purposes and relevancy. How does the curriculum of K-12 schooling relate to the world outside the school? Otto (E) argued that relevancy went beyond contexts in which subject matter topics were found, that it was more of an issue of "problematizing" and leading students to raise issues in the construction of their own knowledge (a functionalist perspective of education). He stated:

The notion of relevancy is very important, but I don't see relevancy. Like we say, "Okay, what are we going to teach them today? Well, we need to teach them the French Revolution. What are kids interested in? They're interested in music! Let's play *Les Misérables* because that's music." That, for me, is not relevancy.

For me what it means is showing students that basically they are the meaning-makers of their own world, and I think by actually showing them [or playing the music for them] that I make different meaning than you do, and why I make certain meaning, and why do you make certain meaning, and that

without me there is no meaning, there is no text, they sort of, to some degree, appropriate their own meaning-making and that, for me, is relevancy, because without the student there is no meaning the way it should be. But I think schooling now is that there is meaning without the student.

Otto, however, is close to Ferdinand's (E) belief that education needs to change to be more relevant. Other educators hinted at relevance suggesting that the topic is not alien to educators' concerns. For Otto, and even Ferdinand, relevancy is tied in with the nature of what education is in its current practices. For example, education currently is a practice of shallow relevancy where an educator might simply copy what other teachers are doing or make a hasty selection of period music to supplement a curriculum component. But Otto would have students become critical examiners of their world and learning both to extract and make meaning from this world. In short, relevancy would enable students to become interactive beings that participate critically in their environment and especially in the development of personal meaning of their world.

Students' Perceptions of the Nature of Education

Students' views about education reflected, in many respects, the different ideas put forward by the business people and educators. However, two responses stood out a bit from the others. Dave (S) first described the nature of education in its basic format of "desks, rows, tests, [and] homework," while Jason (S) saw it politically, as "a controlled environment where the administration believes they can teach you basically skills. [But unfortunately it] doesn't keep up with the growing information that we seem to be accumulating daily. [Meanwhile] teachers don't have the materials or aren't made aware of a lot of the new developments that are happening in the world."

In these samples of student perceptions the systemic structure of education and lack of relevance in education (a problem of purposes) give us an idea that education is far from being a relevant or fun experience. The latter part of Jason's comment is critical in the discussion of educator credentials and education purposes because, from a student's perspective, teachers are not current in their teaching and education is not current with changes in the world. These are perceptions that converge with other participants' views. However, his belief that educators are not current (through no fault of their own necessarily), is not accepted by most educators as an accurate portrayal of education.

Other students focused on learning, such as "learning skills and how to use them, writing skills, grammar skills," according to Frank (S). "[Education is] not much different from business," stated Steve (S) who then added, it is "almost like the cycle of nature: You need certain aspects of it to work together to keep going." Henry (S), expressing many of the ideas as some of the educators and business representatives earlier, and looking beyond the immediate, believed that the nature of education is: "To learn how to live in the real world and what the real world expects of you." The reference to the "real world" is interesting in that it implies that education may not be realistic, a point that ties in with the earlier perceptions that educators may not be current or that education is not being relevant.

Regarding relevancy, Steve (S) favored the practical nature of education, quoting the adage: "Give a man a fish and he'll eat for a day. Teach a man to fish, he'll feed for the rest of his life." Relevancy here is practical learning in preparation for living, which is a point that converges with the responses from other participants that we have already seen.

Educator Resistance

To the question of whether teachers are in the "business" of schooling and resist external commentaries, direction, or expertise, especially from business, all of the interviewees, with the exception of the student sample, agreed. The following responses represent those perceptions.

Business' Perceptions of Educator Resistance

In reponse to my question about teachers being resistant to outside input, Mike (B), more outspoken than the other business interviewees, bluntly claimed: "I've seen that. [Educators are] in a narrow sphere. Hopefully those people are going to be gone, retired, in the next few years and new people come in with a broader perspective. I think maybe the reason being for a lot of years the school was a closed environment, that teachers were not encouraged really to develop or get into partnerships with business." Here is a common thread back to what some of the educators and students said about the nature of education. Mike saw the reason for resistance was because, "a lot of [educators] have not been out of school. They started in school, been in school, lived in school; maybe some of them never really had a real job—well, not a 'real job' but a different job outside of education."

Mike's (B) perception that educators have been in the educational environment for so long that their perspective may have become too narrowly defined finds some convergence with other interviewees and with the literature. The residual effect is that educators are perceived as having an outdated or irrelevant view of the "real world." The implication is that the world of work is changing and the corresponding expected change in education is not there because educators are unable to understand the dynamics of change or unable to act upon it.

Greg (B) agreed with this commenting: "There's got to be feedback to the school system, and it's got to be right back to elementary school. I think the school boards are just as bad, too. They were resistant to CAPP [Career and Personal Planning], I've heard." Obviously Greg thought that the whole of the education system suffered this "problem" of resistance and that one means of reducing resistance is to communicate what is necessary for education to hear.

Greg (B) had concerns as well about the provincial Ministry of Education.

Given the perceived importance of their partnership with Bellevue School District,

Greg thought there should be some acknowledgement and sustained contact from
government representatives. He recalled: "We had some 'higher-ups' from [the
Ministry of Education] come here for a short period, but they stopped coming. A new
person took over, but we never saw him. I mean, you would have thought a business
card on a desk, a passing through, or something." The message is clear: Where is the
courtesy call that one could reasonably expect especially in the setting of business
and education partnering together?

Karen (B) wondered if the teacher resistance was because, "maybe [teachers] want to keep the education system very pure, and because the students are a captive market, they don't want to see corporations taking advantage of that. I think they're acting a little bit like police maybe. And they're doing that in a good way. So, from that perspective I can see where they're trying to do a good thing." This image of educators as guardians of student learning certainly converges with the systemic factors of purposes and more specifically the roles of the participants in education.

On the other hand Karen then cautioned, "if [educators] were strictly [resisting] because they were concerned about businesses coming in and providing insights

that weren't provided by the teacher, then I think that's a negative reason not to get businesses involved." Karen's comment implies that educators may not be acting in the best interests of education. There may be hidden issues here from a business perspective about fearful educators. What needs to be developed from this is the accuracy of Karen's opinion and the systemic factors that would give cause for such fears.

Don (B) offered a different view of educator resistance: "I haven't really found that." I asked him to clarify his stance, pointing out that earlier in the interview he had described difficulties getting into the school because of the "fears" of teachers, for example. He explained:

It's the fears of teachers, and the key question is what do they do with the technology? It's not part of their curriculum, maybe. And the big issue is software. In our case, because it's a gender-equity program, we're trying to bias this towards females. Software available that works the way that females like to work is in very short supply. We helped [Emily]. We gave her a donation to convert some of the Apple software she'd developed to put it in Intel/Microsoft. That helped a little bit.

He admits there are fears but these are because of IT, thus implying that if there is resistance, it is directed at systemic structure problems.

Educators' Perceptions of Educator Resistance

Educators tended to agree with the question of resistance in education. Aaron (E) thought that, "schools might be somewhat reluctant to get involved with the workplace. Some people out there say that kids can't add, speak English, can't read and can't write. This gets educators' backs up and I think this is why they are reluctant to get involved." He continued: "I think that [resistance in education to outside input] is not good. [Teachers] should accept and not resist external commentaries and work together with businesses." Aaron's comment raises possible

questions not only of teacher identity but also of teacher status in the context of governance. Whether or not educators *should* resist or not resist as determined by administrators could equally become another point of divergence and tension ensuring once again that the troubles in education are not attributable to a single or simple matter.

Providing a more expansive view of the problem of resistance, Ferdinand (E) explained:

First of all teachers in general are not business people...and they are suspicious because they think that business is only motivated by the dollar and making a profit. So, they are suspicious of what business might do with education or with the students. I know some companies do have a more global vision and see themselves participating in education in a positive place and a very productive way without trying to exploit, you know. So, I don't think we have to be quite so suspicious, but there are certainly a lot of business people that would exploit. A healthy suspicion is okay, but it shouldn't get in the way of building the bridges.

The critical point above is Ferdinand's insinuation that educators have a guardianship role or at least a protective instinct about the possible exploitation of students by business. This response converges elsewhere with some of the other interviewees and raises a valuable point of divergence between business and education. The guardian ethos permeates the nature of education as a kind of accepted role of *in loco parentis* which is formalized in law in some jurisdictions. Educator resistance is thus understandable and perhaps only comprehensible in this light. At the same time, Ferdinand allows for a truly communitarian spirit on the part of those businesses that participate in education for non-exploitive motives. This opens a wide avenue of potential exploration of partnership possibilities, which is a challenge to educators to become more enlightened about these possibilities.

A practical example of educator resistance that I noted prior to this study was while I was involved with ITM. I had asked Ferdinand (E) for samples of student projects that could be posted on a website (called *Studio A*) where other student projects were posted from other schools. He hesitated at my request, and when I questioned him about this he said that he had concerns about using student projects for a "commercial" place. I suggested that it would give the students public exposure and positive acknowledgement, and that he could certainly ask the students if they would want their projects posted for others to see. He made a general announcement to his students about the possibility of posting some of the projects. The students were in favor. In contrast, Ralph (E) and Leslie (E), two other ITM teachers, both thought it a good idea to have the students' projects on a more "permanent" and public site for the benefit of student and program exposure.

Ferdinand (E) believed that "more integration [is] needed in [teacher] inservices and conferences" for implementing programs, such as ITM. In that way, he thought that teachers would "start seeing the value of it and put it in the curriculum. And once it is in the curriculum more teachers will use it. It is going to be a slow process. Of course access is critical; they need access and easy access; they need help with it and lots of in-service. There are a lot of roadblocks." This is a point that Leslie (E) and Carrie (E) also made. As Carrie and Ferdinand mentioned, getting educators

⁴² During my data collecting, I was invited to a meeting comprised of an international communications corporation, faculty of education from the University of British Columbia, a Vancouver technical school, and a large Vancouver area school board. IT was spoken of as a partnership with positive benefits to education and "name recognition for Nortel" (Research notes). Some of the difficulties, besides the structural arrangements, included getting teachers involved in the latter part of the summer, and arrangements for university credit towards a graduate degree for the teacher participants. Time and accreditation are problematic matters in the discussion of in-services and professional development.

to use IT was a hurdle, as was having the appropriate resources—in this case online access. Better education and resources could enable educators to perform their job.

Leslie's (E) response brought the topic closer to the issue of educator identity. She thought it was, "because of a feeling of safety. A lot of teachers don't want to embrace new ideas. [They're] just not ready to take a risk." She explained:

I think that we do that because a lot of us haven't done anything since we graduated [from school or university] and we are threatened a little bit. I don't think teachers take criticism very well. I think that we are sort of set in our ways and in our teaching styles and strategies, and I think that if you are a very good teacher that it is working and whether you recognize it or not that you are doing things that are really good for kids and stuff. But I think that there are a lot of mediocre teachers and I think that they have to take a lot of comfort in knowing that they are protected by their union, that there isn't really anything threatening, not even parents. You know nobody can get rid of [a teacher] unless you strike a child, pretty well.

There are a lot of teachers who are not even comfortable having classroom assistants in their classrooms because they think they are being judged and this is their little domain. I don't agree with it but I think that one of the worries is that if you let business come in that it's going to be them against us sort of thing.

Leslie's point, which is a familiar one to Blair (E), is one of the most critical ones from the interviewees. She has dared to vocalize one of the criticisms lobbed at education. The security that education can provide can be a reassuarance for some and help to breed mediocrity, as in any workplace. Although she does not belabor the point, it converges with the views of some of the other participants.

Ferdinand (E) expressed a somewhat similar sentiment as Leslie (E), which also converges with Robin's (E) viewpoint regading resistance. For example, Ferdinand stated that:

One main reason with all teachers is they feel they are overwhelmed with what they have to teach already, so most teachers have plenty on their plate and they have enough trouble delivering that let alone taking on new areas. That is one thing. Historically it [IT or computers] has no history, so it is

something new. There is a certain fear factor and some teachers don't want to or are afraid actually to take a class down to the [computer] lab. And then just the availability of the equipment is not always there. We have never really bothered to give computers to teachers, that might be a first step and some teachers have tried that where they actually gave computers to teachers first and that eventually works its way to students.

Such systemic structure elements as indicated in Ferdinand's perceptions demonstrate some of the imbalances in workplaces. But the matter of IT and connectivity are only elements that need to be considered in the context of the whole of education. IT is an important matter to both Ferdinand and Leslie who thought that with better IT connections and in-services to teach teachers how to use and apply it to their respective curricula would greatly improve its use throughout education. However, even with such improvements resistance would not be alleviated because to Ferdinand, teachers "feel they are overwhelmed" by an already burdensome workload.

I asked Carrie (E) if she thought business parntnering with education was what caused a lot of the resistance against outside input, including business. She replied: "I think it is for some of them. I don't think it is for everybody. I think people see that this is good for kids and access to kids is for potential employees or at least good will and/or potential clients. I don't think it is all the 'buck.' [For example,] I'm sensitive to the fact that Chantal (B) needs to leave here at least with some satisfaction that if she put in I40 hours that it has been worth something [to her for her time]." The dual concern for Carrie gives us a glimpse of another perspective on the positive role of business in education along with the importance for business to benefit from its time invested in education.

Concerning educator resistance, Kris (E) agreed: "There's a lot of truth to that, I think. In our system, in high school, we need more identification with business." He believed the business connection with education was important for students' learning. For him, part of the problem of educator resistance was due to political beliefs. He stated:

We need for students and educators [to know] that business is not bad [and to] get out of this socialist crap [belief that] big business is against you, big business is only there to make profits. Well, without that big business there would be no taxes, there'd be nothing. And we've got to sort of educate educators and students to make them understand this is not something to be feared. Private enterprise, business, large companies, this is a good thing.

I showed in the previous chapter on business how most of the participants viewed business as a functional part of society. His views converge with those of the business people and add an idea of possible multiple convergences that may not have been otherwise realized, as educators assume, for example that their suspicions are shared by all of their colleagues. Kris does not minimize business motives but counters the misconception, especially by educators, that somehow business is evil. From his perspective not only does business play a vital role in society, but also this role is good and educators need to be made aware. At least his argument opens the way for educators to dialogue about the significance of these partnerships beyond perceived drawbacks.

Otto (E) had a slightly different view of resistance in education that speaks closely to what Kris (E) and Carrie (E) said. He observed:

Teachers don't come and visit each other's classrooms. They're not used to anybody coming in and telling them what to do, except for the curriculum and the IRP's [Integrated Resource Packages], and those kinds of things. So, why shouldn't they object to business as anybody else coming into the classroom and telling them what to do, although it's ridiculous because so many people do tell them what to do and they don't question that? I mean

the whole curriculum, the whole textbook, the teacher's guide, all those kinds of things tell them what to do. But they have this notion that if they close up the classroom in fact they decide what to do, which is ridiculous...But it's the way, I think, they were taught to think about teaching. That is problematic.

According to Otto's view, educators live in a paradox because they are both resistant to outsiders and ultimately controlled by outsiders, through the systemic factors of form and structure, such as the curriculum and legislation. Resistance in this case has more to do with misquided perceptions.

A divergent viewpoint or at least one that causes a second look at the topic of business and change, was from Eunice (E) who claimed:

You're right about education [being resistant to outside] involvement. But I bet if you went to a corporation—let's just say [Burgers R Us] for a second—and you said to them, "I've got a new way. You've got to change; you've got to move, and you've got to...[and so on]. What you have to do is you have to become more of the spirit of this community, and what we want you to do is we want you to take a portion of your profit and we want you to divvy it out more equally amongst workers. Now, I know that you are going to resist this notion because you've done business in the old way. But don't resist that change." They would say: "It's not change I'm resisting. I'm resisting your whole nut case devotion!" But you know what I mean, it's like business holds itself up as kind of the icon adapting to change.

But in many ways I am sure that if you talked about real change in which you change the way money is distributed I bet you'd find those [businesses] just as reactionary and conservative on blocking change as you would [amongst educators]. So, in other words they'll talk about change a lot, but it's always change that supports their self-interest...And teachers are also [concerned about] how do I survive, how do I cope with all these [systemic] demands and all.

Eunice's point seems to move beyond change as a systemic structure to a focus on survival. This possible reaction of educators against change, or calls for educational reform, is couched in the context of an assumption of change for change's sake. She even implies that demanded changes are nonsensical which only compounds resistance. But her point about balancing the factors of resistance by suggesting that

business would act no differently than education provides a converging point of discussion with education. In that way perhaps both systems could appreciate the problem of change as a matter that has relevance to both cultures.

Students' Perceptions of Educator Resistance

Students did not have much to say about resistance in education. Dave (S), for example, simply shrugged it off with, "some teachers do and some don't." This lack of information should not create a false sense that students are not an important part of the partnership process but, rather, it should create an awareness that perhaps students do not perceive resistance as a recognizable issue, certainly not one to merit their concerns or noticeable attention.

Final Analysis

Throughout this presentation of the participants' responses are elements that pertain to the three systemic factors clusters of purposes, form/design and structure. This section examines their responses in greater detail.

Systemic Factors in Education Purposes

Under this systemic cluster are a number of elements that were mentioned by participants pertaining to education purposes. Recall that purposes have to do with desired goals or outcomes and the participants implementing them and benefiting from them.

Regarding educational purposes and business' desire to see more of an integration of business in education, with the businesses I interviewed, there was not a single admission or even a hint that their motivation was to capitalize on students.

They unanimously expressed interest in helping out with education. As we saw

earlier, too, participants expressed concerns that perhaps there were educators who were not current or "fresh" in their practice. Business representatives saw business as the means of ensuring relevant knowledge for teachers. Mike's (B) point that educators have been so long in education, implying that they no longer have a realistic perspective of what it is like for people coming out of school and going into the workforce, demands consideration in the context of the other divergent responses regarding educational relevancy and, ultimately, purposes.

In particular Carrie's (B) criticism of education for not really meeting the needs of all students stands equally as a challenge to the whole system of education. This very question of relevancy seems pertinent to business-education partnerships, suggesting that they would meet a perceived need among educators if these partnerships addressed, in a critical and meaningful way, how business itself stays relevant and how it, too, suffers this sense of alienation and distance out of the very nature of work. In order for a partnership to progress and see success, it really does demand that education be current and energetic. Here, again, is a junction between education and business that, on the surface at least, indicates a common educational goal with perhaps one exception. The potential positive value of collaborating with business, though, is not something on which educators, in this study, were united. In fact there was a split among the educators about business involvement, from insistence on none whatsoever to collaborative arrangements that were already under way.

Otto's (B) unique questions of reflecting on and challenging roles, practices and ideals offer an unmet challenge to the other respondents with the practice of critical thinking, or "when people come to ask questions," which suggests more than

the adoption of cultural values and expectations. His rather unorthodox stance about what education ought to be, what it tends to be and its link with the workplace is included here as an example of the occasional thinking that takes education beyond the realm of the mundane, or the routine structure of schooling. Otto raises questions that give rise to a more penetrating discussion on education beyond the interests of most educators. Having said that, there is even an implication in the latter part of Henry's (S) question of teachers being current that brings it closer to Otto's radical questions. In these cases the nature of education centers on learning and preparation for work as well as for life. In other words, there is little distinction between the preparation for life and for work, which is a point that is also common to business and education. What is not evident and that business will want to clarify is how both cultures perceive that preparation is accomplished, to what degree and how it could best be developed. Despite the fact that none of the businesspersons made a passing inquiry about the deeper nature of education, or for that matter of business, raising such academic questions may lead participants in both systems to delve deeper into the systemic factors of education in order to understand those factors that affect business-education partnerships.

The fact that the participants in this study expressed a view about education's connection to acculturation and preparation for the future can serve as another place of both divergence and convergence between the two cultures. Blair (E) and Aaron's (E) comments, bolstered by other educators interviewed, assume that the role of education is to prepare students for life. Blair provided the most in depth explanation about the importance of learning tied in with getting a job compared to the other interviewees. The businesspersons interviewed believed as much.

In Chapter Two we saw that one of the purposes of education is in fact the acculturation of young people, which includes preparation for inclusion in the workforce as "productive citizens." In the interviews, it became evident that although educators were divided on the subject, most believed that the preparation for the workforce was a primary goal but not the goal of education. Business, however, tended to begin with this assumption of workforce preparation. This divergent point sets up a potential for conflict between participants in a partnership if left unchecked.

Systemic Factors in Education Purposes: Participants

A subset of purposes has to do with the people who will benefit from or instigate purposes. To guard against non-educational, capitalistic motives, there is a sense in which the educators' role as potential quardians of education or of the dominant culture seems plausible, especially in light of the literature. I would have thought this would be a more common theme, especially among educators, because I have heard it mentioned by educators outside of this study. Yet, there is a sense of quardianship that "comes with the territory" of education. Though not an explicit mandate, education acts, as I have mentioned in Chapter Two, as a quardian in loco parentis. There may be good reasons why this "guardianship" principle is not in the forefront of educators' roles in light of the Tayloristic influences in education. In that sense, then, business and education could share a common point of convergent practice. Perhaps in further discussions between education and business of the systemic factors in education the topic of educator roles could be broached. That could also pave the way for possible convergence between the two cultures if they regard partnering as a potential personal development relationship on top of the enhancement of student learning.

The perception of baby-sitting mentioned by Otto (E) and Carrie (E), widespread or not, needs to be taken seriously whether in the light of education purposes or in the context of partnership discussions. The perception helps to belittle the practice of education rather than promote a positive image of its economic and broader social function. Perhaps it speaks more to the culture of students. In either case I think there is an implicit call to education stakeholders to qualify their understanding of the purposes of education. On the other hand, given the functional structure of education, or Bob's (B) "game farms," it is possible that the baby-sitting role of educators need not be considered a pejorative designation, unless, of course, it strikes at the identity perceptions that educators have of themselves.

Another aspect of the topic of roles is Carrie's (E) response about credentials, which may indicate that it was not a signigificant enough of an issue for the others. Do credentials in education matter, and, if so, to what end? Business seeks input from "credentialed" people in the corporate change or activity sought. In education credentials seem only to matter for the purposes of assuring certification and pay raises in certain associations, such as the British Columbia College of Teachers and Teacher Qualification Service. In practice, however, few educators seem concerned about further education.

Tangentially related is professional development and lifelong learning, which Leslie (E) raises and that ties in with the concerns expressed by Mike (B) and Greg (B). Leslie's observation, "that we haven't done anything since we graduated," is ironic given the nature of education. That is, there is a real pressure—and perhaps an understood and natural ethic—in the IT dominant workplace that ongoing education

is not only necessary but accepted as a given and pursued. That would appear to be a point of divergence with educators.

Ferdinand (E) and to a certain degree Don (B) drew attention to systemic elements of time and workloads that seem to influence how educators respond to outside input. Overall, though, his fairly balanced view of education and business stood out from the majority of the other educators interviewed. Mike's (B) comment about educators as perhaps never having had a "different job outside of education" is probably the most disparaging of all the participants and finds some convergence with Steve's (S) perception that educators are not current. The position suggests that educators have a truncated perception of life outside of school. This raises further questions about the practice and roles of education. But is that a perception that is only true for education? What of businesspersons or industry workers who perhaps have been in business for many years? Is theirs a better or clearer perception of the "real world," as Henry (S) put it? Is this not a possible case that perceptions of systemic factors of education vary depending on one's vantage point? This is a question that would need further study. Nonetheless the perception that educators just might have a more limited view of life outside of school should not unduly alarm educators or education stakeholders. Instead it could be an opportunity for stakeholders and governing officials—including unions—to reexamine the purposes and forms of education in ways that would allow for more interactive and nonthreatening relationships with community and outside interests.

Kris (E), unlike other interviewees, referred to students as "customers" during his interview. But he did not clarify how a student could be a customer, given that they do not pay for any school services. Similar language was used in a high risk

learning center where I worked for a year where students there were often referred to as "clients." Nevertheless, the symbolic gesture makes for an interesting discussion, but one that need not be lost in the semantics of business versus education terminology. Here is an opportunity to search for points of convergence even of expressions that could enable further dialogue about business-education partnerships.

Systemic Factors in Education Purposes: Resistance

Flood (1999) refers to Senge's "mental models" in his work on systemic thinking, or the perceptions that people have of the organization's purposes. Those perceptions, right or wrong, have an impact on the structure of the organization. When I asked participants in this study for their perceptions of educator resistance to outside input, various reasons were offered that, in the end, speak to other systemic factors, such as role and purpose confusions. ⁴³ By "confusion" I mean that the interpretations and perceptions participants or members have of an organization's systemic clusters—purposes, form/design and structure—and perhaps especially purposes (insofar as these interpretations and perceptions are in accord with the systemic clusters), determines the degree of tension or conflict.

Regarding educator resistance to outsiders, there are two parts to Aaron's (E) perceptions that find convergent responses from business. First, as Aaron intimates, there are "some people out there" who incriminate education for not preparing adolescents for when they leave school and enter the workforce. The second part refers to the obligation put on teachers in light of the first part. Business would like to

⁴³ According to Flood's (1999) understanding of Senge's archetypes, what I am calling "confusions" would correspond to his "Eroding goals" (p. 15).

work together with education, which we saw earlier, and has the resources and capabilities to do so. What Aaron does not deal with is the credibility of the "external commentaries" to which he referred. If those outside perceptions are true, then educators will need to address them, perhaps even in collaboration with business.

Ferdinand's (E) idea that business and education are similar, even along the lines of resistance, provides us with an alternative perception worth pondering in partnerships. What are the areas of resistance? Are those areas of a similar theme to both cultures? Could business work more closely with education knowing now about educator resistance and its nature? It seems unlikely given the nature of that resistance as partially resident in the nature of business, but even this bit of information opens possibilities for further dialogue between the two systems with a view to decreasing resistance and increasing mutually beneficial collaborations. Eunice (E) indicates the same citing survival as the business prerogative that would cause it to resist in ways not unlike those found in education. Thus, survival as a systemic purpose becomes a point of convergence between business and education for her. Yet, there is no linking of causes, no acknowledgement of possibilities that business might be able to assist education to "cope with all these demands and all." Ferdinand's discomfort with ITM stemmed partly from his interpretation of the British Columbia Ministry of Education's Integrated Resource Packages (IRPs), and partly from what appears to be, on a broader scale, teacher resistance towards outsiders.

Ferdinand (E) was also conscientious about the lack of university support for the Ministry's "changes in the [IT 12] curriculum." He struggled with wanting to ensure the curriculum was taught while trying to introduce relevant knowledge in order to prepare those students who were planning to continue in computer studies

at the post-secondary level. Thus, he wanted to introduce the students to programming (in Pascal) and computer-related issues. My interpretation was that Ferdinand perceived ITM as an additional curricular project that, although of benefit to the students, had to somehow fit into his tight academic schedule. In the end, it seemed to me that ITM was a burden on the teacher as much it was a case of education culture burdened by a perceived rigid curriculum. Despite business' desire to help, even with beneficial tools, education may be resistant or timorous about capitalizing on outside aid for reasons related to the systemic structure of education.

Concerning Ferdinand's (E) experience and the systemic structure in education, as I moved through my third year of dealing with the ITM program (as an evaluator, mentor, researcher and as overall project director), it became clearer to me that the program was doomed to fail for various reasons, such as its perceived facility of use by students and teachers. ITM was an on-line project management program. A main complaint from students and teachers was that "it's clunky" and "it's too slow; you have to wait for it to load." Ferdinand gave up on using elements of Studio A (the website for ITM) because of the slow Internet connection in the school and because it was not "intuitive." He reasoned: "Instead, we're using Claris Works. It's quicker, easier to use, and all the information can be stored right here on our server. They [students] don't have to wait." Ironically, the very technology that is a strength of Studio A and upon which it capitalizes for its templates became its bane in the classroom.⁴⁴

⁴⁴ In Ralph's (E) class, the school had been wired incorrectly for Internet access severely handicapping its functionality through the single telephone line out of the school and which also tended to be unstable. Leslie's (E) computer lab was not wired at all for access to the Internet. It was announced

This segment on ITM is included here as a corroboration of Carrie's (E) and Kris' (E) experiences of dealing with difficulties and creative management of resources in the routine of schooling. Business—or any outside organization—will want to evaluate these systemic elements and how they might differ significantly from their own expectations and assumptions about educational outcomes and the utility of their partnering together with education. Given Don's (B) experience in Bellevue District where he found it difficult to find a school that would take the company's donated equipment, it is easy to see how one could draw the conclusion about resistance. Educators must deal with various issues in their environment that includes resource management, time and budget restrictions, perceived doubts about their job performance and follow the dictates of the administration. Certainly Don's perception is rather ironic in light of Carrie or Leslie's (E) lament about lack of equipment and access. That is, he was trying to give the school district useful computer equipment but had difficulty finding a receiver, and here were some educators desperately wanting better computer resources but unable to have their requests granted.

Systemic Factors in Education Form/Design

Bob's (B) description of the predatory nature of business is significant when contrasted with his regard for education. Business, in comparison to education, is (apparently) purely self-interested in its drive for profits; hence its competitive nature. Here is a critical point of divergence between business and education. If business wishes to partner with education, a culture that apparently eschews predatory

early in the spring that Leslie's class would become connected.

practices, then it will need to spend some time ensuring that its primary motives for partnering with education is not to exploit the captive audience of students as a new market potential for profitable gain. Or conversely, business and education stakeholders will need to agree on the value of partnering to proceed. However, negative perceptions of education, such as Blair's (E) "welfare state," will need to be addressed in discussing the systemic purposes of education in order to begin to deal with the resistance felt toward business and partnerships.

As an example of some of the limitations on perceptions, Blair's (E) viewpoint of education as a "welfare state" does not admit that there may be similar situations in other workplaces. It may be an accurate portrayal of education but a possible point of convergence between business and education. Pitted alongside Carrie's (E) lament about educators' roles perhaps there are times when it seems as though educators are like indentured workers who have the security of a regular paycheque and who have no fear of losing their jobs (the "sarariman"). On this latter point we can see how it is that the perception of the educator receiving a salary regardless of the effort put into the job could lead to a misrepresentation of the whole of the education system. In business, on the other hand, lack of effort very often translates into either reduced profits for the company or the worker being reprimanded or fired, a point explained by Matt (E).

Not expressed by any of the participants, however, were perceptions of education as a possible place where predation or competition also occurs. Students vie for awards and various achievements. Educators, like workers in other workplaces, vie for positions within the same or in related workplaces. Support staff and administrators compete for positions. Schools compete for high academic

standings (in British Columbia) on provincial examinations.⁴⁵ Schools even harbour predatory practices in sports programs through school scholarships.⁴⁶ Competition and predation do exist in education, although not to the same extent as business, and they make education a closer systemic neighbour to business than either culture may be aware of. Nevertheless, what is useful in this discussion is that the convergences of practice help to at least open wider the opportunity for mutual understanding, learning and possible partnering with greater freedom.

Systemic Factors in Education Structure

I asked Don (B) how he substantiated his claims about the nature of education as heavily influenced and even burdened by social factors. He replied: "Just mainly experience in the workplace and working with the school." Given his years of experience in the business culture and at least a few years of working with the local school district, as well as having his own children in school, Don's belief about education agrees with some of the views of people in education. For instance, Kris' (E) views of education as life preparation converge well with Don's, whereas some of the other educators were adamant that education is doing an adequate job already of preparing graduates for the workforce and does not need to change.

⁴⁵ As an educator in the British Columbia education system, I have been privy to discussions about the significance of the Provincial Examinations for individual schools as well as for administrators. Although not specifically part of this study, I noticed in those discussions that there was a great deal of emphasis placed on the examination results in comparisons with other schools in the district.

⁴⁶ I was the senior boys' basketball coach one year at a high school where a new student to the school informed me that he would no longer be attending our school and basketball program because he had been offered a "basketball schoolarship" at another school. Although the Provincial school sports association supposedly did not permit such practice, a seasoned physical education teacher informed me that there was not a lot that could be done and that this was a relatively common occurrence.

What was not evident from Mike's (B) view of the structure of education is what goes on in the day-to-day routine of the classroom or in the management of education. I got a sense that both he and Greg (B), along with other businesspersons, thought that education could use some outside help and that business was the right helper. Between business experiences with change, such as Total Quality Management or applied systemic thinking (Betts, 1992; Flood, 1999), and education's desire for increased or at least stable resources, there is a potential convergence.

In a related example of practices in education, in an earlier investigation that I had conducted on ITM, I observed the routine of teachers in their day. Consider the following excerpt from my research notes after a session in one of the schools:

Today's visit to Leslie's (E) class was short-lived: she was not ready to make the presentation about the projects and was visibly fatigued. I encouraged her to enjoy her [school] break and that after the break I would drop back in so we could get things under way then. She agreed. The remainder of the time was spent with Ralph (E) and the two of us circulated about the classroom to examine students' projects, what they had accomplished thus far. Some had completed their project (a multimedia presentation about a BMW Z23) while others were only partially done. One individual had not begun his and showed little concern about it. A couple of the groups had designed evaluation reports one of which was a peer evaluation chart.

This detail from the daily life of education represents a glimpse into the existential reality of some teachers working with adolescents in the give-and-take of daily life.

The lack of preparation and honoring of our "agreement" to pursue my agenda that day speaks to systemic factors of purposes and roles, too. What would have been the outcome of Leslie (E) coming to work in a different workplace where lack of preparation might have caused production delays? Why does it seemingly not matter in education?

Also concerning the systemic structure factors of education, there are some critical questions that need to be raised to help us understand what Bob (B) saw when he visited classrooms (that had more collaboration and no more teachers at the front of the classroom), and that enabled him to conclude that educational practices had changed. What types of classes did he visit? Did he see other teachers in various subject matters in different schools? But at least he indicated an understanding of what can go on in a classroom, unlike the other businesspersons interviewed who, in the majority of cases, did not visit schools for any length of time, if at all.

On this latter point of classroom visits, it may be that very few people other than educators and students ever (re)visit a classroom. In the face of Mike's (B) or Carrie's (E) comments that educators have not done anything different since they began teaching, perhaps a dual challenge of business or community and education exchanging roles—or at least passing enough time in the company of the other—would be enlightening to both about what transpires in education and why. And as we saw in Chapter Two, there are already examples of this role development in other countries that show successful arrangements for the benefit of both business and education (Price, 1992).

In the practice of schooling, Bob's (B) condemnation of schools as "game farms" certainly finds some similarities to Mike (B) and Carrie's (E) perceptions of the structure of education. If this is a point of convergence, then education stakeholders, policy-makers and partnership participants will want to examine critically the form/design of education along with its purposes and their impact on the structure of education. That is not to say that only education suffers from, as Kris (E) said,

"structures [in education] that are pointless," but to suggest that education might have some restraints similar enough to business that the two systems could seek a point of convergence. Again, to link this with Carrie's (E) description of the structural environment of education would corroborate much of what Bob describes.

Systemic Factors in Education Structure: Restrictions

A perception about education that comes almost close to Bob's (B) "game farm" is Carrie's (E) lament about the culture of education controlled by schedules and people. There are two underlying implications here. First, there is the implication that schooling is bound by predetermined time constraints and by the administratormanagers who are the school-based authorities. Second, there is the implication that business does not have such a nature, as though there is more freedom or flexibility in business to fill one's time with what is necessary or desired. The comparison may be an unfair one. Time constraints exist in business and organizations also. Laborers, like professionals, are likley to be constrained by the clock as well and, wishing to leave the workplace for some reason beyond the required work, would also likely demand a courtesy discussion with the manager. Educators who have the responsibility of a classroom full of children may be remiss to simply leave the classroom unattended or with someone else in charge. There is a critical difference between education and other workplaces in that education is dealing with groups of adolescents unlike other workplaces filled with machines, products and adults that do not present an ethcial dilemma of abandonment. In this sense the divergence presents a potentially significant hurdle for partnerships.

The restrictive systems of business and education cultures may play an important role as the two cultures begin to work out the mechanics of partnering

together, such as who will work on what and especially when or where. There was a concerted effort by Carrie (E), for example, to ensure that her collaborating partner, Chantal (B), was at least benefiting from her collaboration experience. After all, for Chantal to participate with Carrie meant time away from her business, and business, like education, wants to see that time spent on task is worth the effort.

Students likewise remarked about education as a function of its environment, which includes both the mundane routine and a sociological setting of questionable assumptions and relevancy. This view was certainly shared by some of the businesspersons as well. Such frustrations and practices in the workplace and restrictive environments cut across workplaces and offer a common ground of communication between business and education, at least on a fundamental level.

Conclusion

It is interesting to note that the educators in this study believed changes in education were necessary in order for it to become relevant to the needs of students. This is not a consistent point of view in education among educators. Having said that, what needs to be done is to ascertain what kind of educational change is deemed desirable, to what end and by whom.

Resistance to change was as evident at the student level. With Ferdinand's (E) IT class, for example, some of the students indicated that they were not accustomed to completing so much documentation and detail in school. Although I had provided Ferdinand with examples and suggestions about evaluation in a project setting such as ITM, there was still some hesitation about evaluation procedures. In the end he developed a two-page paper self-assessment scheme that demanded student input on their project objective(s), problems encountered and solutions offered,

documentation means, and what was actually accomplished. Finally, the groups could decide on grades for each project member according to the amount of work each completed.

Don's (B) viewpoint earlier about the immense challenges facing educators in a changing world is also reflected, for example, in the literature (Carnoy, 1997; OECD, 1997; Rifkin, 1995; Postman, 1992), and by some of the educators, as we saw. I have had conversations with educators about the matter of social pressure on education that also corroborates Don's view. Although not hard evidence *per se*, there is enough support literature to suggest that the system of education is made all the more complex by various social factors weighing in on it (Aronowitz, Martinsons, & Menser, 1996; Bruner, 1996; Cuban, 1984; Gibbons, 1990, 1976; Welker, 1992; White, 1982). Understandably, change can be a range of alterations, from cosmetic classroom make-overs, to radical curriculum projects. But systemic change, or deeper reform in education, involves much more than the few ideas expressed here, for example, and far more than the diverse opinions that we saw from the literature.

In this chapter I have shown a diversity of perceptions of education, some of which militate against Jones' (1992) comment in the quotation at the beginning of this chapter. Recall from Chapter Two that people perceive varying purposes of education. From the responses of the participants about education, we can see that education works within a complex set of factors that are neither static nor completely divergent from the systemic factors that shape business. That said, I am not suggesting that the two cultures are related enough to allow easy partnering. Other social factors, and systemic factors in the workplace and in business-education partnerships, will also weigh on decisions about education. In the next chapter I

examine the responses of the participants with regard to their perceptions of workplace, an important connection between business, education and partnerships.

Although every businessperson will likely have had an educational experience, capitalizing on that experience could actually assist business participants to gain a better insight into partnership arrangements with education, such as through an "arms length" reexamination of the nature of education and its differences from, and similarities to, business.

PARTICIPANTS' PERCEPTIONS OF WORKPLACE

In the global information economy, the very nature of the work system is changing—away from permanent jobs as the locus of work toward a complex network of learning institutions, including the workplace, families, and community schools. Yet, these [various economic policies and] strategies continue to focus on jobs simply as jobs or to focus on social support systems based on jobs. (Carnoy, 1997, 26, italics in original)

Schools came to reflect the hierarchical nature of workplaces and were built, organized, and run like factories... (Contenta, 1993, p. 16)

The desegregation of work in the information age has ushered in the *network* society. The transformation has shaken the foundations of our institutions, inducing a whole new set of social crisis in the established system of relationships between work and society... (Carnoy, 1997, p. 18; italics in original)

Business understandably evokes a sense of "workplace," be it the factory floor or the corporate boardroom. Thinking of schools as workplaces, however, may strike us as somehow incongruent. It is important to treat workplace as an independent system in this dissertation because doing so will provide further clarification of the convergences and divergences between systemic factors of business and education, which will help in my discussion of the participants' perceptions of business-education partnerships in the next chapter. The interviewees presented similar views of workplace as typically—though not exclusively—a compensatory arrangement between employer and employee involving some form of work. With the exception of only one student and one educator, the interviewees saw no reason to exclude school as a workplace.

As with the preceding chapters I have grouped the final analysis of the participants' responses under the appropriate systemic cluster headings as a means of further clarifying meanings and the relationships between the data and the

literature. In this chapter I explore interviewees' perceptions of workplace based on the following interview questions that were posed in the interview schedule:

- 1) What is your understanding of workplace?
- 2) Are schools to be included as workplace? What is/are the difference(s)?
- 3) Do schools need to change to prepare students for the workplace [At this stage the question made no distinction of workplaces]? If so, how should they be changed?
- 4) What do you think are the social skills one needs for the workplace?

 As with preceding chapters I have divided up the three groups of interviewees to provide their responses to the above questions under thematic headings that emerged from the analysis of the data. Recall from Chapter One the list of participants were as follows (see Table 1 in Chapter One for details):

Participant :	Represents:
Don, Corporate Administration	Business
(Larson-Simpson Technologies)	
Greg (SkyHigh Airlines)	Business
Mike (SkyHigh Airlines)	Business
Jens (Makschift Engineering)	Business
Dawn (Knowledge Architecture)	Business
Kevin (Mason Good)	Business
Chantal (Gulliver's Travel)	Business
Karen (SportShoe Canada Ltd.)	Business
Bob (Learning Society)	Business
Bill	- Superintendent
Aaron	- Leadership and management in the school
A/	- IT instruction, ITM, leadership in the
	department
Colin	- Research and direction
Robin	- Teaches business education, Career and
	Personal Planning, liaise with businesses in
	community
Kris	- Teaches ESL, photography
Ralph	- Teaches IT, school administration

Blair	- Teaches avionics, shop, liaise with SkyHigh
	Airlines
Leslie	- Teaches IT
Carrie	- Teaches home economics, hospitality, liaise
	with Chantal of Gulliver's Travel
Eunice	- Teaches social studies
Matt	- Teaches sciences
Ferdinand	- Teaches IT
Otto	- University researcher and teacher-on-call
Dave	- Student
Huang	- Student
Frank	- Student
Steve	- Student
Jason	- Student
Henry	- Student
Gordie	- Student
Nicol	- Student
Karl	- Student
Annika	- Student
RU	- Student
Raj	- Student
12 students ⁴⁷	- Student

Workplace

Business' Perceptions of Workplace

In my interview with Mike (B) and Greg (B) the two participants repeatedly emphasized workplace skills over specific content, referring vaguely at one point to the Conference Board's list of workplace skills. Participants from business offered no discrepant views of what constitutes workplace. Bob (B) gave perhaps the broadest sense of what workplace entails. For him workplace is, "where the employer and the employee relationship exists and where one is compensated for doing work for an employer." At the same time he thought that the idea of workplace was "becoming a

⁴⁷ This group of students was interviewed *en masse*. It was a younger grade and did not provide data that added to or take away from the other subjects.

more fluid definition because [of] the length of the work week and the need for continuing professional development in order for the people to stay competitive in the job market. And also the amount of self employment in the economy in Canada has doubled in the last nine years."

We can see by his clarification that he has a respect for ongoing learning in the workplace. Also, his mention of the changing nature of the workplace provides additional details that tie in with the influence of IT and its impact on business around the globe and that effectively enables the mobility of many workplaces. This was the majority view by business.

Educators' Perceptions of Workplace

The educators in this study either viewed workplace as any physical environment in which one performed duties or tasks, or a compensatory relationship between employer and employee. For example, Kris (E) said: "Workplace sounds like the place where you earn your income, by performing a duty or a service or providing a service, or using your expertise to do something." He added: "I don't think geographically there is an identity that says this is the 'workplace'...because I can do my work from home. So, is that my workplace now?" Carrie (E) agreed, extending the definition to include "all over the place." She elaborated: "I think workplace is where I spend the majority of my time during the day, Monday to Friday. But I have created a workplace at home, too, because I need to take work home." Otto (E) provided a similar insight about workplace from a different cultural point of view. He explained: "[Where I come from] it's only 'I'm going to my workplace'...Work for me is really a place where you come to interact with the community, to produce something in common, if it's really a product or if it's thinking

about something, whatever it is that's work." Similarly Bill (E) was quick to tell me that, "it's not a place anymore. It is a context, which can be home as well as homebased as well as institutional-based where there are decisions in communications that are deliberate towards an outcome. An outcome is related to one's livelihood as well as one's vocation." Workplace from the educators' viewpoint took on a fluid perspective that included anyplace where one performs one's tasks, be it home or in an actual designated setting.

Students' Perceptions of Workplace

With an understanding similar to business and the educators, Gordie (S) described workplace as: "Something where you enjoy doing what you do and where you have certain skills that help develop where you are." Dave (S) defined workplace as a "place where things get done, mostly a place where you collaborate ideas, gather plans, put things together, co-operate in order to achieve objectives and goals." Dave's list reflects quite closely the list of workplace characteristics by the Conference Board, for example, which we saw in Chapters One and Two. The other students interviewed either made similar statements about workplace or said nothing. Again we can see workplace as a fluid definition whose characteristics are determined by the activity more than the setting.

School as Workplace

Building on the previous section about the workplace, interviewees, in this next section, were asked whether they thought school could be considered as a workplace.

Business' Perceptions of School as Workplace

Karen (B) thought that, "it depends. From the student's point of view [the school is] probably not [a workplace]. From the teacher's point of view, yes." Chantal (B) who worked collaboratively with Carrie (E), was unsure although she believed "all the components are there. I guess so, in a strange kind of capacity. The objectives are still very similar." There was a hesitance, however, as in each of these two perceptions the participants struggled to include the whole of school as a workplace. There is a mercenary argument—compensation for work done—that seems the strongest basis for defining workplace, and there is a pragmatic argument—Chantal's similar objectives—that broadens the definition to a more inclusive understanding that incorporates students in the definition.

An important difference between business and education workplaces that Chantal (B) made was, "schools have a harder time of finding buy in, getting the students to actually believe that what they're doing and working on is important enough to keep doing and working on. We have that problem in the corporate world as well, but the disciplinary action that we can take has far more weight and significance for the individual than we hope to take in the school." Unlike the business workplace, school workplaces must somehow motivate students to continue to be productive in school.

Notice the similarity between education and business in that "buy in" is problematic. How educators or students perceive the purposes of education (or partnerships), and how much they are in agreement with those purposes have consequences. In the business world, Chantal (B) believes more can be done to

rectify the problem than in schools, such as retraining, moving or removing the individuals.

Educators' Perceptions of School as Workplace

The educators interviewed for this study tended to agree with business' views of workplace, similarly making no distinction between school and business as workplaces. School and business each has its peculiar systemic factors and are comprised of compensatory relationships as well as geographical settings.

Leslie (E) saw schools as "workplaces [even for the students]," a comment that echoes other educators' responses. Otto (E) agreed but with a subtle difference. He stated: "First of all school is a workplace for teachers. I mean we all know that. And school is a workplace for students. It's much more of a workplace than an educational environment. So, definitely, the work of school is work." The implication is that school might somehow be deficient in its capacity as an "educational environment" or that schools could be much more than places of work. What is clear from the majority of educators' perceptions is that schools are a place of work for both educators and students alike.

Matt (E) disagreed with the idea of school as a workplace for students. He offered another consideration of workplace that included distinctions between education and business and which qualified some differences between workers and students. He explained:

The main difference—the big difference—between school and the workplace is that when you are going out to get a job, you're looking for something you're good at, whereas when you sign on at school there is a curriculum that's set, whether you're good at it or not. For some kids, that's great, because they're good at it and for other kids that's really tough, they're not [good at schooling]. So, there's more freedom of movement and variety in the workplace, which I think facilitates success in some kids that would, for

instance, bomb out at school. They can go on and do something totally different. If you're no good at something in the workplace, they'll tell you that and fire you...But with school, if you're no good at it you get to do it again. Now, I suppose the crisis is that in a workplace, if it turns out that the kind of skills you have you can't find a market for, then you're up against a survival crisis, whereas in school it's only more of a kind of a psychological crisis. So, the stakes are higher in the workplace but there's more flexibility to kind of accommodate.

Matt never mentioned the mercenary aspect of the workplace but chose instead to try to delineate differences in workplace practices. It is as though school is functionally different from other workplaces due largely to its systemic structure. In other words "freedom of movement and variety" distinguish outside workplaces from the curriculum-driven and test-for-success practice of school, which does not suit everyone. His contrasting of the systems of business and education provides us with some unique meanings about workplace. Matt seems to be mixing the two as though interchangeable and which would also help to clarify his elimination of school as a workplace.

Robin (E) also argued that there was a difference between school and workplace, albeit perhaps subtle. He claimed: "Workplace is where people seek to be productive to sustain the viability and feasibility of an organization or in business, whereas a school, not being driven by that need for survival, has more sort of a benevolent objective. Kids are working perhaps but working for their personal goals." Robin is denying school as a workplace for students. However, he admits that they do work. The difference is the purpose for that work. For students it is a pragmatic consideration whereas for others it is mercenary. That would effectively deny volunteer services, for example, as work or where the service was performed as a workplace. Matt (E) and Robin's stratification of workplace provides a divergent

point of discussion that would necessitate finer delineations of educational purposes in relation to work and learning in other settings.

Kris (E) saw school's link with workplace in terms of resource differences. He noted:

In the respect of workplace, the amount of emphasis on computer technology now and the fact that it's impossible to provide all the necessary resources in the school for the kids, the ones that have computers at home have a distinct advantage over the non-computer students because, for example...in the teacher's manual [of some of the course texts], the end of each chapter has a unit on it of websites where you have to go to identify certain geographic things, social things, about that unit of study that you're working on. That's integrated into the grade 8 Humanities textbook now where they have to have access to the network. Yet it's mandated in school here that we are not here to provide all the technology resources. We're here to give a feel, demonstrate them, make an awareness, but we are not mandated to provide that [full access]. At least that's the way it has been explained to me. So, there's two opposite things going on here in school and the workplace I think.

The discrepancy between what is readily available in the business workplace compared with what is in schools is an issue of systemic purposes and structure of education. But note, too, the confusion. Kris is not altogether sure of the "mandate," only that he understood current practice as a function of a higher and broader mandate.

Students' Perceptions of School as Workplace

Although the students interviewed had varied ideas about school as a workplace, the majority agreed that there was no real distinction to be made. On the one hand, Huang (S) was not in agreement. He differentiated between school and the external workplace: "Workplace is some place where you work but after school. School is different from workplace. School is where you learn, workplace is where you work." Frank (S) likewise viewed school as a "workplace if you are a teacher."

Steve (S), in keeping with the rest of the student responses, saw workplace simply and comprehensively as "a place where you work, either in a company or at school." Dave (S), too, claimed there was no difference between school and workplace, except that "you get paid in a traditional workplace." The points of convergence for workplace, as we have seen, range between mercenary and pragmatic considerations with some overlapping of the two sometimes.

School Change and Student Preparation for the Workplace

Following on the responses from the participants about school and workplace, this section presents their perceptions of school and change to prepare high school leavers for workplace. The questions do not assume any differences between school and workplace but do imply education is a preparatory "agency" for eventual inclusion in workplace.

Business' Perceptions of Changes Needed for Better Workplace
Preparation

The point about the necessity of educational change was particularly poignant in my interview with Don (B). He criticized education for producing students with knowledge that, according to him, was outdated and outmoded.

Karen (B) suggested that education might become "a little more practical as opposed to theoretical. I think a better balance might be good for preparing students to get into the workplace. Definitely I think with the new technologies emerging that is essential." Change is an ongoing process for education, but also notice that Karen links education with preparation for the workplace, a theme that was consistently maintained by businesses. Bob (B), for example, added that business should also "be

part of the change. I think that there has to be a breakdown of the solitudes and I think that there has to be much more of an integration of the community into the school system and vice versa." What I noticed with Bob and the rest of the business participants was the absence of seeking to control education and the sense that business was keenly interested in being part of a community effort that had the improvement of education at heart. Educational reform did not emerge as a criticism of education but as an interest in assisting education.

Jens (B)⁴⁸ believed strongly that education needed to overhaul its approach to learning. He cited a couple of examples from his own schooling experience where, according to him, even at the university level (he had an engineering degree) the majority of courses were irrelevant to his life. The most useful course, he claimed, was one where "students had to design and build a project that utilized what they were learning in the course." He believed likewise that schools needed to employ "course work in contextual settings." This point about educational relevance is a recurring theme in business.

During his interview, Bob (B) added the following reflection about education and change for the workplace and that ties in directly with the preceding comments by Jens (B) and Karen (B):

The metaphor of the school as an isolated building with a chain link fence around it is really, to me, what defines what is wrong with the school system. If you fast-forward to adult life, there is really nothing in our adult life that equates to both the physical setting to the school system, the isolation of the school system....I think that more of the community integration can occur without any sacrifice of ethical standards or academic standards, or in fact, an enhancement. [Schools] have to change, but not alone, I think the community

⁴⁸ The quotes that I have included in this dissertation from Jens were from notes that I took during the interview, as he refused to be tape recorded.

has to change as well. I think one of the reasons we are not getting the evolution occurring as quickly as we should is because there is too much fault finding on who isn't moving fast enough. It really is a joint duty if you will.

Notice the move toward a balanced treatment of education that includes again this idea of community responsibility. There is a sense of invitation, in becoming a greater part of a larger community, including business, as a way of improving education so that it could be more relevant and consistent with other human experiences.

However, notice there is no consideration of whether or not education would be open to such involvement.

Chantal (B) provided details of her personal experiences working with and in education that sheds more light on some of the divergent elements:

I don't think there's a real understanding of what workplace is about within the education area. We have a very old style of thinking in terms of education. And I really believe they [educators] need to climb into the 21st century. Although it is a very important role that the school is playing, I think it's a bigger small part of the entire education process that happens to ready people for the workplace. But I don't think the educators understand that. I think they're the "be all, end all."

From Chantal's comment at first glance it seems apparent that business thinks of education as merely one of a few socializing agents in a person's life. However, it appears from her last point that her view of educators would challenge their self-perception or identity. Given that she actually worked collaboratively with Carrie (E), her comment strikes me as strangely controversial in the light of Carrie's view of their relationship, which we shall see later on. Chantal's denigration of educators as a narcissistic group ignorant of the "bigger picture" finds support elsewhere including among some of the educators. Nevertheless, what is necessary here is to ascertain whether her experience is actually a systemic problem.

According to Bob (B), "when I define school as being part of the workplace...I see part of the function of education is to prepare students to have the competencies and the confidence to have a meaningful work life." Note that Bob is not determined that schools prepare future employees or workers with specific skills, a common message from business. Indeed, he is indicating a state of mind about being in the world and in the world of work, perhaps contrary to the world of schooling where isolation and protection are fostered. Supporting his idea of preparation "to have a meaningful life" he continued, "and that's a continuum that starts when you enter school, at least in my mind. So, I don't see it as a solitude. But that's not to say that I see school as a job club. I just don't see that, particularly today with your question of technology. The career and workplace training part of our lives just can't start at ages 18 or 21." There is an integration of worlds that ought to be part of the developing adolescent's whole life, according to Bob, as opposed to a segregated "game farm" from which one leaps into the "real world." Somehow this preparation must be a seamless part of education from early on in a person's life.

This idea of "whole" and potential "parts" as part of the landscape of school not only helps to understand its nature, it also helps to understand the pro-school stance of businesses as more than preparation places for future workers. Jens (B) informed me that his firm did not look at school marks, but profiles potential workers "to see if they can work with others, are willing to learn, have got enthusiasm and energy." These skills and attitudes are similar to Bob's (B) list of skills. Bob stated that school change brought with it, "more emphasis on the soft quality of skills. I think poise, self-confidence, communication skills...certainly comfort with information technology...increasing emphasis on a collaborative team work in the work place,

not just the information of technology workplace, but even broader." His list is by no means meant to be definitive or exhaustive. These skills and attitudes are consistent throughout the business responses and for the most part converge with the other participants' perceptions.

Linking with the earlier invitation to community involvement in school change, Don (B) noted: "[Business] can't get involved too deeply [with education] obviously. I think business would like to, because of the kind of students coming out of the [school] system. There's a fairly big mismatch at the moment, and it's a moving mismatch as well." The implied expectations of education caused me to ask him to elaborate. He offered: "The skill sets that [school graduates] bring tend to be too old, out of date, and they're not really fitting in with what's current in the business." The viewpoint that Don expressed is not only representative of business, but it is a common thread throughout the literature, especially on educational reform. In short, school has lagged behind business and this translates to deficiently skilled future employees. And while job preparation is not the whole of the school's role, and the business people in this study did not appear to assume that, it is a systemic aspect of public education and one that would be worth opening up to a dialogue within the scope of partnerships. One way of ensuring that this work preparation aspect does not overwhelm the curriculum or the partnership is to keep the full range of educational responsibilities on the table, in an exchange among business people, educators and students. Certainly, the educators are not averse to discussing the question of better preparation.

Educators' Perceptions of Changes Needed for Better Workplace
Preparation

The educators in this study had a range of views about what they thought business might expect from graduates and what changes, if any, ought to be made in education. For Carrie (E) computers were what she thought needed to be addressed for educational change:

[Education needs] to provide [students] with access to more computers and stuff. [Our department is] having a big fight right now with the fact...we have the...486 [PC], but one of the ones we just sent back was a 386 [PC] and I think it is ridiculous, that it is so backwards that way. And we are getting the stuff that is being sort of trashed from the Tech. Ed. while they are getting new ones. In one way I can sort of understand because as a department in the district there are not many of us that are comfortable with the computers and so it is ridiculous to have a [computer] sitting there if it is just going to be sitting there. But on the other hand, I think that to motivate your students you need this technology. It would be unheard of to not have microwaves in your Home Ec. rooms or not have decent sewing machines [for example].

While Carrie argues for greater presence of current IT across the curriculum, she was indignant that in a time of Pentium II-class computers, which were being appropriated by the technology department, her department had to be contented with barely adequate and outdated technology. By the same token she also intimates that part of the problem lie with teachers who were not employing computers as part of their curriculum. This is a point that converges with views about teachers and their using IT in their workplace that we saw in the previous chapter. Recall that Ferdinand (E) believed additional in-services and workshops would assist educators and that problems of limited IT access needed to be resolved.

Kris (E) continued Carrie's challenge about implementing more IT in the classroom along with the addition of leadership skills, which he based on his previous and on-going experience operating his own business. He explained:

[Students] have to have computer skills these days. I don't think a workplace exists where [those skills aren't needed]...[Graduates] should be able to use a word-processing program, [understand] communications systems on the computer, whether it's Internet, e-mail, voice, fax modem structures, TCP/IP, whatever, spreadsheet and a creative application. They have to be able to create on the computer, because I think in the workplace now, if you can say, "Yes, I can produce with these programs and these programs; I can create brochures, flyers, things like that; I've had experience producing these sort of things," this is what companies look for. They want people that can create on the computer, a better discipline towards a work ethic, to give the kids the greatest amount of experience with leadership, because they themselves have to become leaders.

Expectations for these educators meant having and understanding the proper equipment in order to ensure relevant learning. Carrie (E) also suggested that other expectations of the workplace, similar to Kris' above, required that students "be able to communicate...to be able to anticipate what might be happening and to sort of jump in there and solve it or at least ask the right questions in order to solve it...listening to people in the field...that [business is] wanting self-directed, independent workers who, if they make a mistake, that's okay, it's not a disaster, that they are able to take criticism and learn from it."

Matt (E) spoke similarly, although offering that the understanding of workplace "depends a lot on what workplace they're going to go into. And school's going to tend to sort of concentrate on just a range, but not the total range." He went on to explain the skill sets and attitudes that he thought were necessary for high school leavers in preparation for the workplace:

There's reading, writing and arithmetic—kind of basic to just about anything—working with other people, getting along with other people, cooperation, punctuality, learning how to enjoy work, learning how to deal with stuff you don't particularly enjoy but you've got do, learning how to show up on time, learning how to respect authority and yet respond when you're being stepped on, [those] sort of skills.

Matt's list of generic skills of course would suit any workplace and converge with the other participants' views as well as with the literature. He even comes close to the challenges of Otto (E) who likewise pushed for critical questions in the workplace.

Kris (E) argued for practical skills as a beginning preparation for the workplace, or as he put it, the "real world":

If our goal in education is to prepare kids for the world—for the real world, why aren't they writing cheques in school? Using debit cards? Managing their accounts the same way they would be managing their grades and credits? Doesn't it make sense they should be given that responsibility right from grade 8 when they enter the [high] school system? That we should becoming realistic is, I think, a good term for where schools need to be.

Kris, as we already saw, went on to bring in other points about relevancy of education compared with the changing workplace. But the connection between education and preparation for the workplace was more convergent among those educators who had businesses of their own or who had had some interaction with businesses through their school, typically through Career and Personal Planning connections or IT-related projects. Robin's (E) answer to the problem of workplace preparation and educational change was that current workplace information should be offered to students:

First of all I think there needs to be a course where people—teachers and students—are kept abreast and kept up to date on what types of changes are going on in the workplace. I think there is this stereotype that exists, which we see from the media, and those are things we tend to carry with us. The first thing we need to [do] in order to find skills with people is to remind them with up to date information about what this is doing, what direction people are going, where are the careers, where are the programs that are provided for people with the best instructional opportunity. Then after that, I think we are getting into the core thing I think for people nowadays which is the idea of learning how to learn, because if I go out and leave the school, there are things that I don't know yet...I will need to know how to educate myself, not only where to get the information, but I will need to know how to motivate myself and how to turn, look at the world and make that world fit into my interests and my goals. So, the idea of how people are learning how to learn,

all the technical and practical things go with this, involves motivational ideas of how to serve yourself.

Robin's lone suggestion of coursework and current information seems like the ready response that is already in vogue in education. Education becomes the vehicle by which students learn about the necessary skills for the workplace, whether via information or through short visitations by businesses to the school. The educators interviewed tended to eschew any ideas of special arrangements with business beyond that. But as we saw with Carrie (E) and Ferdinand (E), the participants would both agree with Robin and welcome special information sessions or courses that would assist people in making important career-oriented decisions.

Otto (E) argued that educational change should be school "problematiz[ing] itself as workplace so that when students do get into the workplace they can problematize their own workplaces...! think we need to help [students] or to enable them to ask questions of work rather than prepare them for work. Because to do work you go, somebody trains you for a week." Bill (E) believed that a "school and a school's system objectivity has to be constantly developing, and its flexibility within that, and that's what I mean in terms of adaptiveness to what is changing generally by way of the workplace. But not to the point of a compromise on a fundamental sense of purpose and values, convictions, beliefs, principles that underpin that." The latter part of Bill's statement probably presents one of the greatest challenges between the two systems. The "fundamental sense of purpose and values" that educators perceive and practice appears to consistently diverge from business' perceptions of the same. In many respects Bill's view sounds similar to Otto's necessity of "problematizing education." What became obvious from Bill and Otto's

comments (here and elsewhere) was how they articulated far more reflectively than the other educators interviewed. Whether that is a significant point of divergence is the subject of another study. The point is that if education needs to exist within a state of continuous change, if it is going to improve and stay current, then a more expansive approach will be needed, one that incorporates and fosters systemic and reflective steps.

For all the participants in this study it seemed a common point that school was to be a general "training ground" or preparation place for adolescents so that they would be adequately prepared to tackle the next phase in their life after leaving school. But Otto (E) goes further by suggesting that education become a radical place where individuals learn to question everything. Not only that, "it's how to ask questions. Why am I being trained to do this? Why am I being trained to do it in this way? What does this training enable me to do? What doesn't it enable me to do? What kind of questions does this training not allow me to ask? Why? Who doesn't want me to ask those kinds of questions?" Otto's socio-philosophical perspective might find resistance even among teachers, but the level of inquiry on which he is insisting raises the bar on the discussion between business and education, and even among educators. This does challenge the status quo routine of both education and business and demonstrates, on a fundamental level, critical examination whose end is to clarify why we do what we do. For this dissertation Otto's comments provide us with an extension on the range of perceptions that participants can have, from blind adherence to systemic critique. The possibilities arising from systemic thinking applied to education and business-education partnerships could be very exciting. More will be said on that in the final chapter.

In a somewhat related vein, Bill (E) spoke of skills necessary for the workplace:

A determination to continually develop a sense of objectivity from the standpoint of what I could call sort of independent thinking in relation to who is being communicated with, for what purpose, what decisions are being made accordingly. Within that, therefore, a real reserve of personal flexibility, but behind that a groundedness, a very strong groundedness in a purpose and conviction that underpins purpose, empathy almost in the most particle sense. I say all of this because the level of access is so high that a person has to kind of develop almost their own sense of personal space within what I have just described to you as a social skill in order to deal with the multiple inputs and the intensity of those inputs.

Bill was referring to educators' need for change. What is not clear is how educators might go about effecting change in themselves or what the collaborative assistance could be from the school board to help them. Although a deeply reflective view of workplace preparation for the educator, my suspicion is that educators would likely respond that they are already practicing such skills, which diverges from most other perspectives offered in these interviews.

Consistent with what Robin (E) was saying, Ferdinand (E) spoke of the importance of an active dialogue with business in order to "find out a little bit more about what they are looking for and work that into these [characteristics of workplace and the curriculum]." Here is an open admission of the positive, functional input required from business necessitated by changes in their workplace and what education might do to ensure that high school leavers are adequately prepared for inclusion in the workforce. Ferdinand qualified this immediately: "I'm not saying that should dictate our curriculum, but that should be included in the curriculum, and we need to see what [businesses] are doing and they see what we are doing, and try to mesh a little more." Synchronizing the two cultures for the enhancement of learning because of the (implied) link between education and business is a significant

suggestion from education. Ferdinand elaborated: "I think in the past [business and education] were two separate entities and very little connection and that is unfortunate. I think when a student spends I3 years in a school, some [students] are not all that well prepared to go into the workplace. Nobody has bothered to make that connection." This is a serious indictment against education and against some of the views of educators who, as was mentioned earlier, were adamant that education already graduates people who are adequately prepared for the workforce. In that sense, perhaps business-education partnerships are not about bringing business into the classroom under tight educational regulation, but about providing opportunities for a closer discussions between the two systems in ways that both understand well what is needed in the world and how best to achieve that preparation through school.

A difficulty with the prospects of such business and education synchronization, however, was brought out by Matt (E) who reasoned: "It's tough for schools to change given that once we're talking about 25 to 30 [students] to 1 [teacher] sort of supervisor to supervisee [student] relationship, small room, 25, 26 people, we're pretty much talking about the traditional school as it exists, and it exists that way not because of the perversity of teachers in maintaining a dying institution, but because of the actual physical and economic realities." Given the student-teacher relationship and the systemic form of education, the school workplace has a different environment from most business workplaces. Because education is about decisions based more on economics than on best practices or the people who benefit the most, educational change is problematic.

Matt (E) argued that educational changes, for whatever the reasons, are nigh impossible largely due to the institution that it has become, which creates a potential hardship in partnerships. He continued: "It's hard, I think, for the school to just sort of say, 'Business world needs this. Let's change.' That's a big limitation on schools." Matt's thoughtful reflection about the repercussions of business pressing its agenda to have education change in order to more adequately prepare students for the workplace raises the level of concern even more about the complexity of education and the challenges of change. Matt clarified: "I think schools need to be a little bit cautious about jumping on and saying, 'Yeah, okay, then we'll do that.' I don't think we're sort of responding to workplace demand. I think it's a little bit more like we're responding to the broader social demands and constraints under which we, as a school system, operate."

Here is one of the more critical points in the discussion of workplace and, ultimately, partnerships. When business suggests, along with some educators, that educational change is necessary in order to make education more relevant to the needs of society and workplace, it is more of an issue of economics—for example, increasing job market opportunities—that determines the viability of the change. Having said that the systemic form and structure of school play a practical role in determining educational change or its resistance. Matt (E) is not saying, for example, that schools should be "cautious" about calls for reform because they're the guardians of a social order that needs protection from business or other outside interests, but that schools should embrace change simply because business says it should.

To perhaps remedy the demands for reform workplace readiness or defend school's reticence, Matt (E) suggests that, "the first need, in terms of change, is to change those kids who are not having a good time at school and whose skills are not being developed, particularly those who do have skills that are basically overlooked." In other words, schools do not need to change so much as students, particularly those students whose skills—or intrinsic interests and abilities—are being neglected or that do not fit into the structure of schooling. The issue of reform and teacher participation aside, Matt indicates that such systemic changes in education "would have an impact on workplace, I think, because [students would] go into the workplace with a greater sense of who they are. But it's not directly because the workplace has changed, so therefore [schools have] got to change to keep up. It's a different sort of change."

At one point Matt (E) acknowledges that educational reform is necessary because the workplace has changed, which is consistent with other participant responses. Yet, schools are not about to change because of their culture. The apparent paradox here is perhaps clearer in Matt's declaration: "As far as how well our graduates [are] fitting into the workplace, I don't really have a very good, clear idea. I think that's an issue, that we do live in separate worlds." This admission is a critical point. Businesses and schools can function in the same social context, even the same neighborhood, where students will likely seek their first employment experiences. Yet, schools have trouble responding, may not be capable of responding, to the changed and changing needs of the workplace. Almost sadly he realizes, "we're not getting what I would consider authentic knowledge. It's not necessarily what the workplace wants. It's almost like, 'What really is the workplace?'

Not from the workplace owners' point of view but from a broader [viewpoint]. Then we might need to make some adjustments." Matt approaches Otto's (E) critical reflective treatment of workplace and even provides us with his own critical reflections about the nature of education. How could education be reformed given the complexity of its very nature seems to be what Matt is asking. This stands as a good starting point for some questions needing to be raised as business and education begin to dialogue about partnering together. Having said that, it might prove to be a moot point as education continues to live out its systemic inertia.

Leslie (E) expressed essentially a similar idea. She stated: "Schools don't necessarily prepare kids for the workplace, and I think they should. There are some programs, such as the one that we've been using in this classroom to getting them to do work orders [ITM], and there are some career preparation programs, but I don't think it catches the majority of students in this school. So, I think we're failing." This admission, consistent with Ferdinand (E) and Matt's (E) views, seems to me to be a vital bit of information in any discussion about education. If the current education system is indeed failing to prepare adolescents for the workplace of their future—the main lament of business—then somehow there needs to be a means of ensuring that the problem is rectified or at least well understood. Leslie explained her point further:

In order for students to make a connection with the real world, they need to be working with business, and business needs to realize if they have a job opening, and they want someone young, they may not have the experience. They can actually offer summer employment, career preparation or work experience so the students can get a taste of their business. So, there is that hand-in-hand relationship that I think is necessary.

This "real world" that Leslie mentions, and that shows up elsewhere in other conversations with educators, is what Matt (E), for example, alluded to in his

discussion of the "separate worlds" of business and education. In this case the "real world" resides outside of schools where high school leavers will need to function. A convergent point with many of the educators and business, Leslie's suggestion of business and education cooperating "hand-in-hand" continues to maintain a kind of limitation on the proximity of business to education. Information sessions are permitted and business can hire, even if the young person does not have the experience deemed necessary for the position.

Kris (E), focusing on the nature of education and the statistical reality of its graduates, urged changes that would see a greater focus on the majority of high school leavers who do not go on to higher education. He stated:

The big picture is the provincial average is 19% of kids go on to postsecondary education. I believe that's the standard number. So, why we are teaching what we are teaching? I sincerely believe we're teaching it because that's what was taught to us...We're not teaching for that 81% of the population. We're focusing on 19%. How many kids in that 81% need grade 12 math for the rest of their life, or grade 11 math for that matter for the rest of their life? How many of them need writing 12, writing 11 to function well for the rest of their life? It's a totally preposterous education system as far as I am concerned...I have great frustration when I look at our English departments where they will teach Shakespeare and they will teach this and that, and they refuse to acknowledge the fact that there needs to be training in technical reading skills. And that's a perfect example of the way our education system works today: refusing to accept the fact that the kids need a totally different set of skills to survive today. I mean there's a lot more kids making huge bucks by being able to program one of those industrial cooking units at [Burgers R Us] restaurants, and he has to have complete skills at technical reading than he's ever going to get reading Shakespeare. And yet we don't focus on that.

There is not only this education-workplace connection. Kris is also suggesting that educators deliberately ignore both the actual needs of functioning in the world and a more inclusive or practical curriculum.

A related topic concerning change, one that gives us another glimpse of the nature of education, is Leslie's (E) desire for updated equipment and software. She sighed as she explained: "I can't always get what I would like to have, and I've been told by colleagues that I should just work with what I'm given, just be happy, adapt your programs. And it's hard to say to students, 'Well, you have to learn this program even though nobody in the real world uses it, at least it shows you have a bit of knowledge." As we saw in the interviews with Carrie (E) and Ferdinand (E), for example, it is worth noting again about the lag in IT usage and hardware capabilities in education compared to outside workplaces, especially in business where IT has radically altered the face of its workplace.

Carrie (E), in our discussion about IT and its role in education as part of change in education in preparation for the workplace, confided that IT was not a prevalent practice by her colleagues because "we haven't been trained." I asked her what needed to be put in place before IT could be effective in education. She offered the following:

I think there has to be not just [professional development] days, but there should be an on-site technology person who is hired and possibly have some teacher training. I think it would be very hard to come in here and sort of be a diploma program [graduate] out of somewhere and I think that maybe they need to be a teacher that is really interested in [IT and education]. I am a little worried...that people don't have a sense of how frustrating it is in the classroom for us and I'm not sure that is legitimate, but I just think that it probably should be somebody that has taught and has still their finger on the pulse as to how difficult it is to have thirty kids in the room. I just don't understand why we aren't all on the computer. I think that people are scared of it, and I think that teachers like everybody else are resistant to change and there has to be time and place for them to learn.

Part of the systemic form of education, besides its restrictive structure described by Carrie, is the lack of IT inclusion unlike other workplaces where it has a more

pervasive and practical role. For Carrie, the problem lay outside teachers with education administration and IT departments. At the same time, however, there is an admitted degree of fear of change in educators preventing simple reform in education such as more use of IT as part of the curriculum.

Ferdinand (E) also mentioned this problem that education has concerning IT and teacher usage. IT ignorance was equally evidenced during the implementation of ITM. There students told stories of being scoffed at by educators because they were going to fix a computer problem in place of the regular teacher or district IT technician only to be followed by a look of amazement that the student "knew more then he did." The potential imbalance between education and business linked to IT is a hurdle that the two cultures may need to overcome, but one that could easily demonstrate to stakeholders and educational outsiders that while educational reform is heralded, the complexity of the problems that reform seeks to rectify are greatly underestimated and misunderstood.

Students' Perceptions of Changes to Better Prepare Them for the Workplace

When students were asked about change and school, there was a mixed response. Nicol (S) and Dave (S), for example, were satisfied with education as it was. But at the same time, Dave suggested: "If we have more courses like [ITM], it would probably be easier to go into the working world because this is what we face in the working world." I asked him to elaborate on this to which he replied: "All the planning we do and evaluation, and project managing and collaboration, is the exact same thing they do there." I asked him how he knew that. "[Burgers R Us]," he answered. Jason (S) similarly made the connection between school and business,

claiming that school "should teach a lot more interaction between student and teacher, and more real life situations that we're going to encounter, [or the] 'real world', supposedly the world this school is preparing us for." Here is that reference to the "real world" again, as though school is not part of it. Other participants in this study, which we have seen, shared a similar perception.

Meanwhile, Huang (S) was adamant that: "School should provide more opportunities to reach out into communities," while Frank (S) was of the opinion that, "all schools teach too much basic knowledge as opposed to problem solving skills." This latter viewpoint was ironic given the ITM course that was available to him in which problem-solving skills served as a practical element. Finally, Steve (S) added: "Schools could have a better program to prepare for the workplace. If there was a way to integrate what workplace is like, a company or something like that, and assimilate that in school, [it] might be easier to make the transition getting out of school." Yet, in all high schools throughout British Columbia high school students must have credit for work experience as part of their graduation requirements, or the very "program" of which Steve was speaking. My experience as a Career Education Facilitator convinced me that although students could easily get this credit at earlier grades, not all the work experiences were beneficial. In other cases, students either were not inclined to seek a work experience or were ignorant of the program despite public announcements and encouragements to discover more about personal career options. This point corroborates the complexity evident in education as, in some circumstances perhaps, partnerships will need to deal with people who may lack interest and initiative.

Students in general, in their perceptions of expectations of the workplace, articulated ideas that are very similar to the views of the other participants. Karl (S) thought that, "there are more and more jobs out there which require the use of computers and other types of media." He went on to add, "people skills, interacting with others, maybe going into sales or whatever you have to know what the customer wants and know how to talk to them, and preferably have a second language." In a rudimentary way, Karl's list is an excellent match up of expectations expressed by business, for example in the Conference Board's published list of workplace skills.

That all three groups interviewed in this study had convergent views about the need for some form of workplace preparation serves as another critical factor in the dialogue between education and business about the possibilities of partnering together. If students are unsure either about the program content in their own school or about the "real world," then education stakeholders will do well to examine how it is that adolescents could be attuned better to what is available now and what is expected of them later. Obviously better preparation for the real world, according to many of the participants, is more than "talking heads" in a classroom.

Final Analysis

Systemic Factors in Workplace Purposes

A major point of divergence exists from the data in how business and stakeholders in education view the purposes of education. These divergent views have a corresponding impact on perceptions of education and education's utility in connection with outside workplaces. Organizations, such as the Conference Board, have a list of general the workplace skills that are viewed as necessary for success in

the workforce, and some teachers unions, such as the Alberta Teachers Association, also post a similar list. Despite these lists, participants agreed that the high school leavers of today do not possess, or are lacking, these basic skills that, theoretically, could enable them to enjoy improved gainful employment.

Although educators in this study were not so inclined to have business as a partner in delineating education purposes out of fear of a narrowly driven set of goals, business was consistent in its articulation of a broader vision than specific workplace skills. For instance businesses in this study consistently saw education as a preparation ground for life and the workplace. Educators and students, on the other hand, were split in their views about the purposes of education and the outcomes. Educators either believed that education was already performing adequately in life after school, and that students were attaining jobs, or that education was in need of some changes. If indeed students are "performing adequately," then business is inaccurate or perhaps too self-interested in its expectations of educational outcomes.

The changes that were admitted necessary in education tended to be focused on structural factors—material and human resources—as opposed to how education's purposes might be modified and adapted, or if they even needed to be, in order to accommodate changes in the world. In other words if the computing technology were improved upon in schools and if there were more businesses that would come into the school to assist in giving information about the workforce from their perspectives, then students' learning would be enhanced. In every case in the data, however, not only was there little, if any, thought given to a systemic approach to resolving problems in education, but the participants' suggested changes only served to obfuscate or handicap solutions to those problems.

I mentioned to educators the concerns raised by business that education is not preparing students properly, or that the literature on school-to-work transition tended to focus on the problems in North American education. About half of the interviewed educators scoffed or offered justifications for the apparent discrepancy, such as: "That's because [business] wants specific skills, or they want schools to prepare students for their particular line of work." The remaining educators, however, agreed with the business "complaint." Four of the educators interviewed even tied in their own readings or experiences in their responses. Although some of the educators in this study thought that there should be more business and education collaboration as one means of informing students about the workplace and change, this is not a popular belief, either from this study or the literature. This poses another area of divergence between business and education regarding the purposes or reform of education.

Bob's (B) allusion to learning, of ongoing education after school, ties in with our examination of education and change. In business, continuing education is a necessity. From what we have seen so far in the interviewees' perceptions, there is a place (as much as a need) for learning how to learn, which begins early. This is what Alexander (1997) was saying earlier and runs contrary to the general perceptions expressed by the educators interviewed. Such ideas of change and the need for education to accommodate change in order to appreciate better student preparations for the workplace were not common themes among the educators interviewed. If the systemic purposes of education remain as static statements, then the likelihood of achieving positive change to ensure a current education is slim at best.

The descriptions of the skills "needed" for the workforce that educators and students gave in the majority of cases obviated a critical divergent point between business and education. Matt's (E) understanding of the general skills that business seeks in its employees is consistent with what business in this study was saying, although those businesses refrained from listing sets of skills. Instead, some participants referred to the Conference Board's list of general skills as the critical set necessary for the workforce. Yet, the skills apparently taught in education, as suggested by the majority of educators and students in this study, tended to be broad or generic, skills that according to some commentators, such as Marshall and Tucker (1992), were adequate perhaps in a bygone era. Business' perceptions of the skills it regarded as both requisite for the emerging new workplace and apparently lacking in students diverge from education's view of itself and its outcomes. These discrepancies suggest education may be systemically incapable of reforming or there is a problem with business' understanding of education purposes. On this latter point education purposes may be so problematic (i.e., vague, too broad) that their articulation is wide open to broad interpretations, which in turn lead to all sorts of issues.

Marshall and Tucker (1992) in Chapter Two, for example, report that there is an endemic perception in business that education is preparing students but it is preparing them for the wrong time period. The point of divergence here is that business made no distinction between the world of the workplace and the world of education, implying that school was merely the beginning phase for eventual inclusion in social responsibility and work. Education is not antithetical to business or other social institutions; it is a connected phase in one's personal development in life.

Systemic Factors in Workplace Form/Design

What education does in the articulation of its purposes is largely determined by the design or form prescribed or that emerges from how the practitioners perceive of those purposes. From the interviews, it is clear that although workplace is where one works, schools are viewed differently depending on whether the emphasis is placed on the whole environment as a place of production or on the individuals in that environment. In this chapter we saw two divergent views held by respondents. There were the majority of those interviewed who thought that there was no distinction between business and school workplaces, whether or not one is compensated for their efforts. There were only a few respondents who thought there was a distinction that effectively eliminated students from the definition. A broader definition that included any work being done as constituting a workplace would make schools an inclusive place. That is students would not be excluded from considerations in the dialogue between business and education about partnering together. This in turn I think would enable education stakeholders and business to accommodate more people who are affected by the decisions being made at the various levels of education.

When I showed the workplace characteristics grid to participants in this study for comment, Matt (E) thought the grid was not representative of all business practices despite my assurance that it was meant as a broad representation of general characteristics in workplaces. Business, however, saw the characteristics grid as generally encompassing similar elements in both the education and business cultures. If the grid's language were the problem I could see that a series of grids might have to be developed that entertained the individual meanings or elements of

particular workplaces, a kind of "pattern language" per individual workplace. This language difference, a potential point of divergence between business and education, is peninsular, though, considering that Ralph (E), as with other educators interviewed, readily saw the language as similar to educational use. On the other hand if the problem were conceptual, if the grid's terminology provided too narrow a conceptual understanding, then it seems plausible that Ralph was merely adapting the terminology into education thinking. That would mean that he, and likely other educators, could perceive similarities between the concepts rather than the actual language used. Either way, both business and education would need to examine their understanding of specific terms and concepts and seek a common ground of communication if for no other reason than to eliminate miscommunication in the partnership dialogue process.

A point that converges with the general concept of educational reform, which I discussed in the previous chapter on education, stems from Otto's (E) critical reflections about school change in preparation for the workplace. In each question posed to him he responded with a challenging examination. It became evident to me as I spoke with him that he was not a malcontent in the sense of being unhappy with his job. He was discontented, though, with the practice of education, a view that arose from his teaching experience and his desiring improvements in education. On just that plain there is no difference from the other educators. All the educators in this study indicated they wanted to see changes in education. What does separate Otto from the other respondents is the length to which he went to explicate his views and the knowledge he brought to the topics. The dilemma is not divergent perspectives of school change but how school change could be broadened to

systemic reform, how that reform could be instigated, and to what end such reform would be directed.

Elsewhere I spoke of educational reform from a business and economic perspective. Although it is relatively easy to insist that the systemic purposes of education workplaces must be clearly understood in order for business and education to partner together, the respondents' perceptions of education challenge such insistence by demonstrating how it is that those perceptions diverge sometimes at critical points. The consequences to education and ultimately to partnerships are not only that people view education differently, but also that students may not receive the benefits of those goals as the interpretations of those goals are pursued.

Part of the main problem with calls for educational reform is the lack of a systemic approach. School change in preparation for the workplace limits reform to form and structural elements. The change needed in education is a complex undertaking that demands a review of current systemic factors in the education system as a whole, including school as workplace. Only then will educational reform begin to be appreciated as an ongoing process without necessarily being imposing or threatening. Also, ensuring that business-education partnerships are for enhancing student learning (an act of educational reform), and connecting workplaces opens other avenues of possibilities.

Systemic Factors in Workplace Structure

Potential divergent points lie in the perceptions of workplace as a function of compensation. What I found with the students interviewed who were enrolled in ITM was their quickness to see no difference of workplace designation. Thus, school as a workplace even for students is the majority view of the interviewees. However,

Matt (E) delves into the psychology of the workplace and the difference between the workplace of the paid employee and the geographic space of the student. In this case, as with Robin's (E) comments, "workplace" is interchangeable with "business," thereby reifying the distinction from school. Although there is no doubt that students perform work in and out of school—they are assigned homework after all—the few discrepant viewpoints indicate a need for clarification of systemic factors of structure and form/design in education.

In terms of the form of the education workplace, IT must play a part given the changes around the globe and growing dependency on this technology, a point made by the educators. Unfortunately education suffers from limited resources, or the building blocks that enable the systemic form of education to function, that arguably could enable productive student learning enhancements. From my experience in working with ITM I discovered that in many instances students requested undertaking some of the project work at home so that they could use their current software and better equipment. In another case, Durk (E) lamented the stack of PC 386's, cast off from a government agency that had upgraded, that took up space in his lab, machines whose sole purpose was now to be disassembled so that students could see the inside of a computer. Here was an example of a misplaced philanthropic act for the donor had no understanding of the actual IT needs of the school. For Durk, and I am sure other educators in similar situations, receiving donations that have no other purpose than wholesale "spring cleaning" with no regard for the recipient's actual needs is in some respects an insult whose questionable gesture does little to aid education. We should not hasten to conclude that the onus is on business to be more circumspect about its philanthropic gestures.

Given the example in this study of the donations policy problem mentioned by Don (B), education is equally to blame for its lack of clear direction. A systemic thinking approach would identify to all stakeholders and business the educational factors in need of attention. In this way IT cast-offs and other extraneous donations could be eliminated.

Systemic elements of governance in business or in education are areas of important consideration in this complex world where linearity of thinking and governance continue. In this study none of the participants offered suggestions about how school boards or educators could change their governance policy and practices. Again I would tie this point in with my argument earlier above concerning the need for a systemic approach. The Tayloristic structure in education converges with most business practices. Having said that, there are calls for business reforms that include alternative systemic structures, such as by Alexander (1997) or the OECD (1997; Carnoy, 1997). Business, in its endeavors to see changes in education, never once in this study offered a comparative example for education to follow. One possibility that this suggests is that business, linking perhaps with education, could explore alternative practices.

Conclusion

The idea of the workplace, or work, cuts across the two cultures of business and education and ultimately constitutes practically any location where one performs a task or duty according to the general consensus of the interviewees in this study. This includes geographic and physical contexts as well as a broad spectrum of who the "workers" are.

A matter worthwhile investigating further is how educators would develop a workplace characteristics grid for education. In this study, most of the participants agreed with the grid that I presented, but were not in agreement that the terminology was equally comparable in both systems.

Educators tended to have the view that business had a possible dual purpose for becoming involved in education despite claims to the contrary. The two purposes were either to gain market advantage irrespective of any learning enhancements for students or to advance their agenda of the workplace-specific preparation. Business participants in this study meanwhile all expressed disdain for any corporate demands for specific skills or pre-trained students for their particular line of work, mercenary advantage, or political campaigning. These were not the goals of education that they sought, nor was educational change a matter of ensuring a specialized workforce.

The common view of workplace expressed by the participants as wherever work is done also allows for a possible broader field of discovery for partnering. That is, a partnership arrangement could actually operate outside the workplace of either culture. This effectively constitutes a neutral territory in which the partnership workplace could develop a little more freely unconstrained by some of the meanings of either culture's regular workplace. I will save the elaboration of this idea for the final chapter when I look at bridges and possibilities. All in all in the context of workplace, there are many convergent points that serve as additional starting places for partnership considerations or foundations. What is of utmost importance to ensure successful outcomes, whether from partnerships or just the dialogues, is that both cultures and education stakeholders consider education systemically rather than in a linear, problem-solving way.

PARTICIPANTS' PERCEPTIONS OF BUSINESS-EDUCATION PARTNERSHIPS

[The] way to achieve greater awareness among the potential work force and the community at large was not through presentations to students...however charismatic the presenters might be, but through a progression of experiences designed to bring an industrial dimension to the 5-19 curriculum as a natural element of children's learning. (Price, 1992, p. 30)

By linking private sector resources to the education process, it is possible to increase understanding between business and education. Business realizes the current constraints on education; education recognizes the workplace applications of the curriculum and the importance of life-long learning to train and re-train for today's ever-changing business environment. (Calgary Educational Partnership Foundation, 2002)

In this chapter I examine the participants' perceptions of business and education partnering together. As with the three preceding chapters, I have divided up the three groups of interviewees in order to analyze their responses to the interview questions. Thematic headings that emerged from my analysis of the data that will be helpful in organizing the data and analyses are: partnership expectations, experiences and boundaries. The information from these thematic areas is then analyzed further in the final section of this chapter under the systemic cluster headings. From the second set of questions in the Interview Schedule, "businesseducation partnerships" (see Appendix 1), the following questions were asked:

- Have you worked in a collaborative relationship with business/education, or do you know of such collaborations? Describe the collaborations.
- 2) What have been the best points of collaboration between business (or community) and schooling?
- 3) What have been the negative experiences between business and schooling?
 Why do you think that is?

In the latter part of this chapter I deal with the following related Interview

Schedule questions under the heading of partnership boundaries:

- 4) In what ways, if any, should the business community be involved in public education beyond assisting with resources (i.e., equipment or funding for school activities; goods/services)?
- 5) When or where do the lines or boundaries need to be drawn? Who should draw them?

Recall from Chapter One the list of participants were as follows (see Table 1 in Chapter One for details):

Participant	Represents:
Don, Corporate Administration	Business
(Larson-Simpson Technologies)	DOSII IC22
Greg (SkyHigh Airlines)	Business
Mike (SkyHigh Airlines)	Business
Jens (Makschift Engineering)	Business
Dawn (Knowledge Architecture)	Business
WALCH I COMPANY OF THE PARTY OF	Business
Kevin (Mason Good)	
Chantal (Gulliver's Travel)	Business
Karen (SportShoe Canada Ltd.)	Business
Bob (Learning Society)	Business
Bill	- Superintendent
Aaron	- Leadership and management in the school
Al	- IT instruction, ITM, leadership in the
Average of the second s	department
Colin	- Research and direction
Robin	- Teaches business education, Career and
	Personal Planning, liaise with businesses in
	community
Kris	- Teaches ESL, photography
Ralph	- Teaches IT, school administration
Blair	- Teaches avionics, shop, liaise with SkyHigh
1.04 (6.78)	Airlines
Leslie	- Teaches IT
Carrie	- Teaches home economics, hospitality, liaise
The state of the s	with Chantal of Gulliver's Travel
Eunice	- Teaches social studies

Matt	- Teaches sciences
Ferdinand	- Teaches IT
Otto	- University researcher and teacher-on-call
Dave	- Student
Huang	- Student
Frank	- Student
Steve	- Student
Jason	- Student
Henry	- Student
Gordie	- Student
Nicol	- Student
Karl	- Student
Annika	- Student
RJ	- Student
Raj	- Student
12 students ⁴⁹	- Student

Partnership Experiences

In this section I present the perceptions of those participants who had actual experiences with business-education partnerships, experiences that provides us with further insights about partnering.

Business' Perceptions of Partnership Experiences

Don (B) was responsible for helping to place computing equipment in schools donated by his company. He recounted the following:

The best thing that we've seen at the school we worked with first of all, there was this big technological barrier. Teachers were very frightened, very scared in making the change. At [Mount Cook] school there was one young teacher that was pretty keen on technology. She has made a huge difference. And then, luckily, there was a liaison program with UBC, Dr. [J. who] made a huge difference at that school. I think the other thing is they were relying on Larson-Simpson for a lot of help. At one particular key meeting we said, "It's your gear, you go for it." And we just left them. That made a big difference as well. They stopped relying on us. They started relying on themselves. Things took

⁴⁹ This group of students was interviewed *en masse*. It was a younger grade and did not provide data that added to or take away from the other subjects.

off. We've gone through lots of struggles. We just had a meeting a couple of weeks ago where the young girls in the classes were leading the introduction of the technology and we also saw the effect on the core teachers—which are all female. They've gotten to the point now where the students have been teaching their mothers about the technology, and we now have a mother volunteer helping in the school. So, from all of that it's been fabulous. But, it's been a long road to get there.

There was a sense of genuineness as he spoke proudly of what a handful of people in his company had accomplished. What they had accomplished was to get a group of people interested in using IT and computing equipment, a group that, more importantly to him, were young women who, before Larson-Simpson's donations, had little use for or interest in IT (see Klawe & Leveson, 1995). The enthusiasm that Don had was about seeing a group of students, their teachers and even their mothers learning how to use the donated equipment and software to the point where the company could bow out of the picture. Enhanced student learning was evident by Don's account. In return the company received good PR and personal satisfaction for the employees who participated with Don.

At the same time Don (B) noted that his efforts were not without problems. Don claimed: "Donations can come in whether they fit or not [into the curriculum per se]. How do you integrate them into the curriculum? How do you integrate them into the school, and into the school board, and into the Ministry of Education? None of that has been really clearly defined. It's invented on the fly all the time." The nature of the partnership in this case tended to be hampered at the beginning by the school board because it did not have a clear protocol for educators to follow. According to Don: "I would say there is a desire for [business and education] to work together but the methodology to have to do that is very unclear. It is being reinvented every time." The long struggle to get the company equipment finally in place led to his concerns

about the district's lack of donations policy and school politics. Through Don the company provided technical training and support (service) to the participating teachers and students of Mount Cook. The participating educators benefited from the training as professional development at the corporate office and were able to take knowledge back with them to the school and use it directly to enhance learning and their curriculum delivery. There is no mistaking the value to the company in the form of positive community PR, kudos for the company trainers, and potentially even greater returns in the future, such as having students and teachers accustomed to the company's products and having first-hand experience of a positive partnership.

Regarding positive value for partnership efforts, Mike (B) explained matter-of-factly:

We try to make our relationship [with the school] what I call sweet and clean. There's no exploitation, commercialism. The schools have asked, "What can we do for you?" And I've said, "There's nothing the school can do for us; we're doing this for the students." We don't need [the company logo plastered on the] school. We don't need a school. We're there for the purity of education and we don't want to contaminate it with exploitation.

We've got, we think, a better employee in the long run [thru partnering with schools]...We've given them [eight students] the opportunity to evaluate the job to make a determination before they waste 18 months of their life going to [technical] school and decide that they should've been working [in another field] instead of coming here working in aviation; giving them options and then to try them out before coming here.

Both Mike and his colleague, Greg (B), were positive about their experience with Laurier High School and with their teacher contact person. As an effort to promote a positive learning experience in avionics for students they were able to enjoy mutual learning for themselves, as well as give a group of students an experiential taste of the business should they decide to go on to technical school to study avionics. They hoped there would be a benefit to SkyHigh as a result of their project, which was

that students who decided to carry on with avionics after their exposure to the business would be a better fit for the company.

Some school districts complained about SkyHigh's decision to partner exclusively with Laurier High despite their refusal to participate at SkyHigh's request. Greg (B) lived in the area and had taken responsibility for the program. Thus he chose to work in his home region because, according to him, "it saves me the commute." He explained the process of choosing Bellevue district:

The same offer was presented to a lot of school districts and they just couldn't see going beyond maybe having us come in for the day and talk about airplanes but no commitment that we're going to run this program. We made it broad-based enough that it's not just specific to one company. It's an aviation course where you can get into a number of areas of aviation, not just come and fix planes. So, it has kind of jiggled and moved and grew a bit from what we initially tried to do. But I am very satisfied with where it's heading. We've got other airlines who are partnering with us—it's like sub-partners to help us out.

I was not privy to the presentations made to other districts nor do I know why the other school districts turned them down. I do not know, for example, what the purposes were for initiating the partnership in the first place. The partnership was finally accepted in Bellevue District and it evolved to the point where other related industries were becoming attracted. From Greg's experience we can see the resistance of education to outsiders. In this case we do not have the full scope of the process from the time when Greg first had the idea to approach schools through to the meetings with educators and finally to the acceptance in one school. The politics as well as the perceptions of those educators first approached are additional systemic elements that could help us to understand better both Greg's perspective and the reactions from education. However, despite the seeming innocuousness of Greg's

proposal, this event points to a number of mitigating factors that face the participants who instigate partnerships.

Mike (B) continued Greg's (B) account of the selection and initiation process:

We presented to Bellevue District. Initially they were not going to do this [partnership]. I guess they didn't realize the magnitude of the business and the potential that there's 20,000 jobs at the airport. It sort of looked maybe at the time, as this is SkyHigh trying to get people involved in a project just for SkyHigh. But once they went out and did some homework, they realized "Holy crow, this employer is huge. There is the potential to go with this."

Earlier I discussed other difficult experiences of business and education cultures not fully cognizant of one another's real needs. The implication in what Mike says is that Bellevue School District suddenly realized that there was a benefit to them after SkyHigh's presentation and after they had examined the scope of the project. Mike relayed an additional problem with their proposal. He explained: "I guess the other thing is the project—when we initially presented it—seemed like the person who would have to instruct it would have to be a very specialized person. You couldn't give it to somebody who did French Immersion [for example] and they did justice to it. The right person came along to fill that gap." That "right person" was Blair (E), who knew Greg (B) and Mike and who also knew the intimate details of what the project would entail. Mike (B) and Greg's (B) perceptions of the partnership parameters converge somewhat with Don's (B) experience in the school insofar as making the right contacts and having committed people willing to take some degree of ownership of the partnership initiative.

Mike (B) and Greg's (B) experience also provides us with a glimpse at just how tenuous some partnerships can be despite the best efforts and motives. Mike explained, "Three years ago [the school district] was trying to dump students into the

program, but one thing we found is it's our program. It may be a partnership but it's still our rules, it's our company. We're responsible for [students'] safety and everything while they're here. I'm pretty hard on them." The critical ownership of the partnership in this case favored SkyHigh. What this imbalance indicates is a partnership in tension as one partner, either unsure of the parameters, or unethical in their implementation, applies a rather *ad hoc* strategy for its purposes. That SkyHigh did not terminate the project but chose instead to set the record straight with the offending party proves some integrity of motive and tenacity of purpose. Here is an example of systemic factors that, improperly conceived or interpreted, can undermine a partnership.

Mike's (B) story prompted me to ask: "What happens if you lose the man [who supports and works in the program] in the school? Is that going to cause a bit of a wrinkle?" The following response ensued between Mike and Greg (B):

Mike: I don't know how that's going to work. I guess you've got to look at who comes to replace [him], hope that the program doesn't die, wither on the vine and die because the catalyst is gone that made it grow.

Greg: But we have to look at the other way, too, because next year the school's on its own with no funding from the government to do this program. This is where we're going to see where the school board's commitment is, whether they're going to do it and absorb the cost themselves.

Mike: I don't know where it's going to end up. That's the most current problem that we have with the program. We hope it does [continue]. We've built back to the students and their needs. I don't know how many are enrolled, but they're expecting to have this course next year and we've built the hope into them now that this is part of what's offered at this school. That's the downside of the program on pulling the rug out is there's 20-some-odd people who have heard either from their friends or who have observed that this is pretty interesting. What happens to them? That's the sad part. You've got 20-some-odd people—innocent bystanders—who get affected by politics, or whatever you want to call it.

Greg: I hate that word: It's called life, reality.

Their perspective coincides with a similar concern raised earlier by Bob (B) about program longevity and politics. The uncertainty of knowing if the partnership would extend past the next year caused real concern about the effects on the students. With Don (B), there seemed to be no concern about what could happen with the program he helped establish with Mount Cook School. It was as if he had completed his task and now it was time to move on and let the education participants continue without his assistance.

Politics plays out in business as well, though perhaps not as clearly as in education sometimes. Mike (B) and Greg (B) took on the business-education partnership between SkyHigh and Bellevue District on top of their regular work. Work was begun on the partnership concept after a sympathetic supervisor left and was replaced by one "with a different opinion about this relationship." Mike and Greg explained:

Mike: We kind of went underground and did a lot of work on our own time and our own cognizance. Now it's getting back, highlighted again because the environment around here is lending itself to bringing in apprentices. So, this is a natural thing, or relationship. We're giving it a higher profile now bringing in high level stakeholders to make sure the program's still there. So, this is part of our politics to get high level people involved at SkyHigh so it won't [end]

Greg: Mike and I in February spent two or three hours trying to convince the director of maintenance and engineering to give us a blessing to bring [Laurier High] in. We got it.

Mike: It was a closed door until we forced it open.

This dialogue demonstrates the impact that internal management can have on the partnership process. Elsewhere I discussed Mike and Greg's efforts in the context of having to deal with their peers and administrators. At the same time it is evidently not just a simple matter of having the desire to partner that is enough to start. Mike

and Greg's experience demonstrates how the process can be a struggle. In this case they had to convince senior administration and the people who would be directly affected by the partnership. Their's was a similar experience to Don's (B), for example, and certainly is a point that converges with many such experiences with change.

Kevin (B) explained to me that Mason Good Investments sought to develop a general brochure to help parents and would-be investors better understand Canada Savings Bonds. Such brochures have been made available in schools at certain times. In this case students were permitted by one particular school to attend the business workplace where they had to follow the business dress code, got to use the company resources, learned how to use current technology to design the brochure, learned the rudiments of investing and of Canada Savings Bonds, and were to distribute the brochures to adults and parents via the school. Kevin had made all necessary arrangements for paper stock and printing from other companies in the community through his connections at the local Chamber of Commerce. According to him there was an incentive to "the school to get the brochures out" in the form of a percentage return back to the school for any bonds purchased through Mason Good as a result of the brochures. Although there was no indication on the brochures or direct marketing involved for the company, some adults objected and "the brochures just got dumped," Kevin said, shrugging his shoulders to emphasize the powerlessness of the company to engage everyone in the community in a worthwhile effort. There is no doubt that the students learned much about this business culture, from dress code and behavior to commitment and responsibility. On the wall in the foyer of Mason Good hung a portrait of the student team along

with a plaque proudly proclaiming their partnership. Nevertheless, there was an air of regret in Kevin's description of the demise of the project.

With the businesses interviewed, with the exception perhaps of SportShoe Canada, I continued to get a sense that these businesses were seeking genuine, positive educational experiences that would enhance student learning. Here were actual examples of businesses that took an interest in education not for marketing gain but from genuinely wanting to help. Bob (B) added the following "correction" of the meaning of partnership. He explained: "I think it's important for all of us to understand that the 'community partnerships' is more of an applicable term than 'business-partnerships'." This community connection is one that continually arises throughout the interviews, impressing upon us the message that schools need not be lone systems that deliver education in solitude. As we shall see under the section dealing with expectations, this is not a simple task.

Educators' Perceptions of Partnership Experiences

Carrie (E) explained her partnership with Gulliver's Travel as, "a very, very positive one that we have been able to come on board together and create something that is very positive for our students by [Chantal (B)] bringing the best from business and me bringing the best from education, collaborating on something where we are walking down the same path, and it is to the students' advantage." Her perception of the positive business-education partnership reads almost as the norm and it certainly converges with the positive responses that I received from those interviewees' with partnership experience. But it contrasts with the perceptions of the remainder who, either not having had a partnership experience or a less than positive one, were not so quick to advocate partnering with business. For example,

Robin (E), who interpreted as partnerships the associations he made with local businesses through his career-based CAPP programs, explained that he "found most places seem to be very open to collaboration and that the amount of moral obligation, not only that organizations feel but individuals at their own personal level have, towards helping kids, helping curriculums, and so forth is quite high." In another school setting I mentioned this response to a teacher, Marvin (E), in our informal discussion about corporate involvement in education. His reaction was to rebuff both the philosophy of business-education partnerships and Robin's reply as acquiescing to a business agenda. Marvin's divergent viewpoint represents a common one in education, as it expresses the suspicions that education has towards business "with their corporate agenda."

A challenge to Marvin's (E) opinion is posed by Blair's (E) view. He stated:

Partnerships are great but most of the people in education have never been in business and don't have a clue as to what's going on out there. They have a perception of what's going on out there. So, [businesses] don't know how to deal with educators, especially in the trades. You take a look at most guys in the trades [who] may or may not have finished high school. You can kind of sit back and assume that their educational experiences in some cases weren't exactly the highlight of their life, so they may not be too keen on teachers to begin with.

Now we've got the two trying to understand each other's position. [For example,] we have an educator who worked in the PNE while going through university [and] you've got an industry guy who scraped through grade ten. We're trying to mix the two; it's like trying to mix oil and water and it's hard sometimes to sit back and see what the other guy needs. Both sides want to be right. You get the tradesman who [wants to] get rid of all this soft cuddly crap [in the curriculum] and teach this kid how to pick up a hammer. You might have the educator who says, "Hang on to some of that stuff for a well-rounded education. You've got to throw in some of that stuff." Well, that's like oil and water. The unfortunate thing is that if either side digs in his heels [one is going to walk away], or [the other] is going to get frustrated. After awhile they're going to say forget it, we're out of here.

Blair has raised three valuable points here. The first one is that educators share a relatively common baseline education. To get into the field of education one needs to graduate with the recognized certification to that end. This common education experience also works against teachers who might interact with industry, most of whom, according to Blair, "have never been in business and don't have a clue as to what's going on out there," which is the second point. Indeed, if it is true that teachers have been so long in education that their perspective of the "real world," as other interviewees call it, is somehow distorted, problems are bound to arise in partnerships with outsiders. Well-meaning calls for educational reform will go unheeded partly because they exist in a foreign space to educators.

The third point is that the narrow range of qualifications among teachers contrasts with the wide range among industry workers. The educational status of the workforce, including trades, varies from high school dropouts to holders of advanced degrees. These differences in credentials potentially stand to have negative consequences when business and education try to partner together. Part of the problem, Blair is saying, is that there are people in business who have had negative experiences with some teachers and these unfortunate experiences are another factor to contend with. This problem, notice, is also connected with teachers' supposed limited experience of the world of business.

At some levels it appears that credentials permit certain participation in meetings with high-level personnel in business and education experiences in either culture is open to improvement. As an education administrator, Bill (E) provided this example of mixed cultures and valuable information sessions for the benefit of both:

I've had some interesting contacts that have been very eye opening for me. For the last close to three years now I have been part of a national group that brings [administrators]—from ten to fifteen of us—from every region of the country together with business leaders [and] companies like IBM and Apple, not [a major IT corporation] yet, [but] just large companies that have a stake in the education industry. We come together for very intensive discussions for about two or three days somewhere in Canada twice a year and our whole purpose is for them to take an opportunity with us, to share with us a product, a service, a point of view, a concept, a possibility for education as a market place, and for us, in groups of four or five—they're called "panels"—to be brutally honest with them, from the standpoint of whether or not we think of the viability, practicality, philosophically or whatever else.

The return for them is huge because where else would they be able to get that kind of feedback. The return for us is huge in that we have the connection with one another cross organizationally. One could say, cross contextually. In other words we've developed a kind of fellowship among ourselves we wouldn't miss for the world and it's because we have this informal opportunity as well to share our respective worlds, to see both the commonalities and some of the differences. That's one of the problems.

The other has been sort of a founding member of a group called, "the learning partnership of British Columbia." Now, it has just completed its first year of existence. It borrowed from a model that has been operating in the Toronto metropolitan area and then Calgary for some time. And it brings together people that declare their partnership in support of public education: [Banks, newspapers] and then all the others, six of us as school districts. It is a very informative relationship right now.

We are saying we have this commitment, both practically and philosophically, in a collective and in a truly collaborative sense to do the right thing by public education, and its value is an awful lot more than its profile, than its product. Just the fact that it exists and that these people outside of their immediate objectives have this declared commitment for partnership is very important.

Bill's rather unique partnership experience in other circumstances and other professional business settings might cause some people to wonder about objectivity in partnership arrangements in that district. What would likely be of concern to educators in general are Bill's comments about "huge returns." On the surface at least, Bill sees the coalition of businesses and education administrators as a situation that benefits both. Business gets to "feel out" education (represented only by upper

administration) and education has an opportunity to respond. Notice, though, that Bill makes no judgement on business. Their meeting together is an avenue for open expression and discussion of ideas. That business is also viewing education as a potential market is also admitted.

At least one problem prevalent in schools but missed by Bill (E) in his meetings was addressed by Carrie (E). At one point in her description of her partnership arrangement with Gulliver's Travel, she complained about the problem of underachieving students and its impact on partnerships. She stated: "Students down at the bottom end of the class still have no initiative to commit with their clients." These "clients" were practice subjects who pretended to be customers to be served by students in their hospitality course. Student interests and commitments are systemic elements that demonstrate the complexity of education and that handicap wholesale educational reform or that could interfere with partnerships.

Carrie (E) shared another problem that had arisen in the course of her partnership with Chantal (B):

Some of the people on the staff and some of my neighbours came to me to say that there wasn't a follow-up coming through from Gulliver's Travel. And that was frustrating because it was out of my control and it wasn't good PR for our program if in fact these people were trying to support us by going through Gulliver's and then Gulliver's was sort of dropping the ball that way. It didn't have anything to do with Chantal, too, because she was a marketing and sales person and had to deal with someone in her office that had sort of taken on this role of being the agent for the [school] contracts. I think it is resolved now but that was something that was frustrating. I think that one of the things to do with the kids, I feel a little bit frustrated when they let Chantal down, because I feel that her time is so valuable and is totally donated, whereas my time is paid for, and her time is not paid for in the project and to really try to make that clear to the kids that you are letting her down when you are not following through.

According to Carrie's account, she is able to understand the nature of the problem and its solution, but she reveals a resulting anxiety towards the students. The systemic elements detrimental in this situation include students' commitments, community perceptions and the office staff's understanding of the nature of the project. The problems that she encountered, however, were not so serious as to derail the partnership. But we can see how easily systemic elements could combine to negatively affect, even destroy a partnership relationship. It is just such problems as we see here that are unchecked or not anticipated in the partneship process.

On a positive note, Carrie (E) revealed to me how significant her partnership experience had become:

Other than [the problems mentioned] I think it has been wonderful. The contacts I have made through Chantal are just fantastic. This Dale Carnegie [course], for example, and even some of the people at [the airport], and somebody at tourism in Bellevue. She has just been fantastic. It has really opened doors I wouldn't know even how to open. Half the time Chantal goes to the meetings with me so it has been a wonderful way to introduce me and she is just so excited about the potential working in the school. She has taken us to Bellevue Chamber [of Commerce] luncheons so that the kids have gotten exposure that way about our program. So, it has been really good that way and we have gotten media attention. It has just been great! I love it! It has been so nice for me to go and have lunch meetings, which I had never had lunch meetings outside of the classroom here. We will go and have luncheon meetings or breakfast meetings and we just don't do that [in education], and it seems I have business cards and I had never had business cards. It has really given this job more than four walls.

Carrie's enthusiastic description of her experience brings with it a certain *naiveté*. Though not the mainstay of all workplaces perhaps business cards and luncheons are nevertheless common enough practices in North America that they do not gain any particular attention of business. Here it is evident that education differs enough from the culture of business that common systemic elements, such as luncheons and business cards, are seen as exciting perks to the uninitiated. Carrie's final comment

above, in the context obviously of the partnership, implies a professional growth that seems to have no other equal in her teaching experience. That partnerships could be construed as opportunities for professional development finds both convergent and divergent responses among the educators.

Students' Perceptions of Partnership Experiences

4.54

The students I interviewed who had partnership experience had been part of the ITM program. Dave (S) was an exception. He briefed me about another business-education partnership arrangement beyond the ITM program in which he received, "training at the library." He continued: "We had people from IBM coming in teaching us how to be mentors, and project management and organizational skills. So, that helped us." He provided no details beyond this, details such as why the company chose those skill sets for the students, how those skill sets would benefit students, or how the company managed to be in the library to begin with. Essentially, students' perceptions of partnerships seem on a par with other educational activities: some are interesting and useful.

Partnerships and Expectations

Although I did not specifically ask about partnership expectations, the data presented enough responses that either alluded to or spoke directly about expectations that it seemed appropriate to have a separate section devoted to the topic. By "expectations" I mean that as the participants spoke about partnerships there was an interpretation of purposes, whether of future outcomes, present practices or past experiences.

Business' Perceptions of Partnerships and Expectations

Karen (B) thought that, "some people are very skeptical or can be very skeptical of why business wants to get involved with a school. They maybe see us as predatory as opposed to doing something that's a win-win for both parties." I asked her to clarify "they," to which she replied, "the [educational] administration." Karen gives us a glimpse of the problem that had caught my attention when I was working in the ITM project and that had served as the impetus for this study. That is, there is a suspicion in education towards business, which in this case business acknowledges. Bypassing a solution, it is obvious to her that partnerships can potentially be a good experience for both cultures. This "win-win" expectation was a perception held throughout the business interviews.

Karen's (B) passing comment that educators, "maybe see us as predatory as opposed to doing something that's a win-win for both parties," provides a valuable viewpoint about educators' suspicions of business' motives in education. I have dealt with business' "predatory" nature earlier in this study. Karen passes over that aspect of business without considering whether educators are correct. Yet, from the perspective of business, business' predatory nature is a rather trite concern considering the benefits of partnering with education. Chantal (B) offered a further explanation of the perceived benefits of partnerships, at least from a business stand point. She stated: "There's a benefit if we're actively involved in the education process. Throwing money at the problem isn't going to solve the problem. Being involved in it, and helping identify [the problem]...is a win-win [solution]." This willingness to co-address education's problems, (for example, a lack of funding) was at the heart of all the business responses to the interview questions. That

convergence of partnership purpose indicates to me that there are two competing motives for partnerships. The one seeks to work with education in an effort to improve it. The other seeks a position of sheer market advantage and increased profit irrespective of any educational enhancement.

Another problem that Karen (B) indicates is with educational administration. Somehow educational administrators handicap partnerships. Greg (B) and Mike (B) implied as much in the dialogue about their attempts to establish a partnership with schools and other school districts for their avionics program. Likewise, Don's (B) efforts were stalled in his dealings with several schools in Bellevue School District where his company was trying to donate high end IT equipment, a problem that included educators as well as administrators. Evidently the expectations of partnerships are ill defined and undeveloped, according to some of the businesses interviewed.

Bob (B) wondered about the possibility of education taking the initiative in approaching business about partnering together. For example, he suggested that, "it would probably be very helpful if somebody could sit down with a lot of companies and say, 'Look, we don't want to get any money from you today, but what we'd like to do is offer you some planning expertise in terms of how you can decide where your resources can best be applied in the education system." Bob's idea that education could initiate the partnership process runs counter to the prevailing expectations of business as the leader. His point finds convergence elsewhere among the educators as well. That education could benefit by giving a cohesive and unified argument to business for a win-win partnership is apparent to Bob. One of the benefits he sees would be a learning opportunity about the needs in education.

However, his proposal diverges from some of the other business views that indicated how education lacked policies and direction, as well as the ability to unite and educate business.

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According to Bob, part of the problem with partnering was that, "it's not a donation and it shouldn't be in the donations committee. Motives are right but the vocabulary is wrong." Bob (B) thought that this was a typical business reaction to current steps toward partnering:

Most schools don't have the luxury of having somebody full time on the partnership beat. That also applies to companies. One of the big problems of getting education partnerships going in the business world is nobody wants it on their desk. Everybody is interested but everybody is busy. A person says, "Well, I don't have the time," or a PR person says, "I don't have the budget," and a finance person says, "Well, I don't know anything about it." So, if you are going to make this happen to the degree that it should, you need a real education process going on in the business community.

When it comes down to partnering, business also has its share of practical difficulties. If partnerships were to develop, which seems inevitable from the funding crunch that education seems to be suffering, then the role of a partnering specialist or committee—mentioned already—would benefit both parties by allowing the participants to concentrate on their work while the specialists could develop the partnership parameters.

In another but related topic, Bob (B) iterated:

[Partnerships take] a lot more than a photo opportunity showing your employees out cleaning the street. To make a commitment to the school system really requires a top-down commitment in the business community. So, I absolutely think it's an obligation. Why? Because we all have a vested interest. If you look at it in the crassest of terms, the longer that we can keep a kid in school, and the better education that kid gets, the greater their contribution [in society], if you want to look at it in those terms. I look at it in the other terms is that the social cost and the development cost in a society of having a lot of people not reaching their potential is tremendous, and schools can't do it alone...We're not even really nibbling at the edges of it yet.

The expectation that young people will need a lot of extra assistance, and that assistance should come from society as a whole, is a systemic problem with a systemic solution. As we saw with Mike (B) and Greg (B) in their efforts to get their project underway with Bellevue School District and the difficulties they encountered with their own management, education as a socially connected responsibility is not a shared practice. Although community participation is an expectation, I see that educational reform is more than the infusion of resources but requires a systemic approach that could best determine collaborations and resource allocations.

Don (B) recognized the imposition on business posed by partnering and the ramifications of business' input in education:

It's purely from a volunteer basis with nobody being paid by Larson-Simpson to get involved. It depends on the local volunteers. We're in a business that's dynamic, changing. The pressures on us are enormous, so the volunteer time tends to get cut back. When we work with the schools, they need as much help as they can get. We can't provide as much as they want, which is a problem. We've been trying to seed some people within the school system that connect as mentors to the rest of the teachers to try to spread it that way, but that's difficult. I think the other thing we found is the political situation within the school system is sometimes difficult. There are different agendas going around.

This response from Don came when I asked him about the problem areas in partnering with education. The perception of business is that although education needs and expects business to give, business has to rely on volunteers and education needs help—more help than business is able to give. Having contacts within the education system to educate the educators is an arduous task and business must contend with different politics in education. There are convergent points with other business interviewees.

Bob's (B) experience was somewhat similar. He explained: "I have met, in over the past five years that I have been in the education partnership business, hundreds of managers who have said to me, 'I would like to go into the school system but I can't get my boss' approval because it isn't in the budget." The reality for some businesses is that sometimes the financial resources are not available to justify a partnership with education. And although human resources may be more avaliable than financial resources, the company must still cover the expenses of employees who leave their workplace to participate in education. Bob described his experience going into the education system:

I was a teacher. I'm a public speaker. To do a classroom presentation and follow-up, it takes me three days because you just can't go in and give your *spiel*. You have to find out where [students or schools] are and what point they are in the curriculum and what kind of outcomes the teacher is looking for, what it is that you are doing that might have a fit. Then you have to prepare your presentation. If you are talking to senior grades, then you have to prepare three or four because they work in teams. Then you have to have an evaluation process afterwards.

So, if you were to take a typical company and say, "Okay, can we get fifty classroom visits a year." That's a hundred and fifty days—and that's person days—if they are really going to do it well. And that is almost a year's salary for a senior management person. So, it is a huge commitment. And if on the other hand they are just going out and making a presentation that says, "the Ace Insurance Company is a wonderful company and we are going to tell you our history and we are great guys, goodbye," they are wasting their time and the teacher's time.

How do you get there? You get there by convincing [business] that it is a really good investment. They think that one of the best things you can do in management development is spend some time in the classroom. If you can develop the communication skills to reach kids, there isn't an adult audience that will worry you. They are the toughest audience. They can sit on their neck bone and look at you as if you are the most irrellivent thing on earth. And if you can go in and reach kids, it is terrific management training and it is one of the best things a company can do for company moral. But the whole education process has to occur.

In the '80s I spent most of my life as a public relations executive in a large company and, for example—let me put it in a context—in 1981, I was with a large firm in Canada. I had a PR budget of \$5 million in 1981 dollars—that's a lot of money. I didn't have \$2 in there for education. And there wouldn't have been any reason to I mean, when I went to the board of directors with my plan every year, in terms of my communication plan, nobody would have suggested, "Well, gee, are you doing anything in the schools?" That's changed. And I think there are a lot of reasons for that: demographics—we have more concerned parents now, because that's that whole generation. They have a great concern for what we're leaving our young people, and I think that's part of it, and I think they're having an influence in companies, and they're steering their companies to think in that direction. But we're still just on the fringe of it.

From Bob's comments it is evident that in addition to expectations of classroom visits, some limitations on partnership are internally based, or are a problem of internal politics and budgets and not merely administrative red tape. That point converges with other business experiences that we have seen. Bob takes seriously his example of a Human Support partnership. In the related situations that he described, both the representative classroom visit and the budgetary consideration, businesses do have a good comprehension of some of the systemic elements of partnering with education.

With regard to practical delivery in the classroom there is the problem of preparation and time away from task. This time element has been raised before and once again demonstrates that there is a tangible cost to business in partnering. In addition, the budget decision-making process and how it is that education likely does not fit into that process illustrates poignantly the impact that partnering can have on budgets as well as on the people involved. The expectation that business has unlimited resources or should oblige education by sending in representatives to speak on work-related content for the supposed benefit of students is problematic to business. Time and company resources will be affected by the absence of business representatives to visit schools, a significant point to business.

On the matter of budgets, Bob (B) also commented:

My interest of course is in the area of providing curriculum resources. Why I think that's important I think business should be involved in that area providing curriculum resources for the simple reason that curriculum is a very dynamic, changing initiative in the education system. I didn't know, and most people don't, that a kid in grade seven today, if they were to take all of the possible optional courses—Provincially approved courses—by the time they finished grade twelve, in this province, they could take over four hundred courses. And that's just Provincial courses. And then when you add locally approved courses on top of that, there's something like 2000 courses in the school system in British Columbia. If we're talking in terms of what are called IRPs (which I think means Integrated Resource Packages), whereby you have the curriculum but you have some goodies that go with it that reinforce it for the kid, the cost of developing one of those—according to the Minister of Education—is \$200,000. The cost of developing one full-spectrum curriculum package that really gives the kids a whole lot of relevant application materials in addition to the core curriculum—well, if you've got as many as 2000 subjects, and if the cost of really doing one well is \$200,000, it's a no-brainer to figure that there's some help needed here.

This matter of curriculum development in relation to budgets and the corresponding need for aid to continue finds some convergence with what business has been saying. Bob actually provides us with a real example to illustrate the point. But it is not clear just how business could benefit from helping education with the budget necessary for curriculum development. The challenge will not be to bring about a meeting between the two systems to work out the details. The real challenge will be to examine the critical systemic factors that could enable the two systems to begin to discuss the problem of budgets and curriculum in a way that would allow both sides to benefit equally without detracting from the purposes of education.

Bob (B) elaborated on his view of business and education in partnership in a way that helps us to appreciate the complexity as well as perhaps the temporal limitations on partnering. He claimed:

[Partnerships] generally fall into the same pattern, and that is where—and I'll generalize—where not enough research is done as per real needs. A group of

people sit around a table without talking to an educator and say, "Here's what we really think is needed." Those kinds of things generally don't fly very well, because schools are busy places. And the other ones that are negative are when expectations are created in the education community and not delivered. Those are the worst, because of all the lessons you could give kids, I would think the worst lesson you could give them is that the adult community can't be relied on to keep its word. So, when you start projects—partnership projects—that should have a 3-5 year life and they die after one year for budget reasons, or lack of interest, or you can't get volunteers, or whatever, you're better probably to have not done it at all. That's not a case of faultfinding, or anything. It's just that happens far too often. So, those are the downsides. But then you just keep hearing of things that convince you that so many interesting things can be done, and new ideas come forward.

In the first place, business is accused of developing policy in a vacuum without regard for the real needs of education. The expectation is two-fold. First, there is a tacit expectation that business could know the real needs of education and that education would accept business' decision. It is a situation touched on earlier in this dissertation with Durk's (E) computer cast-offs from a government department. The computers served no long-term useful purpose for Durk's IT classes. What he really needed was current software and computer technology that could enable his classes to function better and relevant in the context of global IT.

Bob's (B) second concern of partnership commitment to a project for a period of time makes sense for other reasons too, beyond the potentially negative fallout for students. There is a reasonable expectation with any project that, whether initiated by business or university researchers, the participants will be committed enough to follow the project through to completion. It is not the case, however, that long-term commitment is there. The realities of economics and funding arrangements or politics sometimes preclude completion (further below I provide the example of the early termination of the ITM project). A systemic connection is found with Don's (B) experience. He claimed:

From a guideline point of view, if students coming out of the school system are in synch with industry, that helps everybody. They tend not to be in synch. The other big issue that Larson-Simpson has found in North America is the gender-equity situation. We're finding that girls are being turned off math and science in the kindergarten to grade seven. And from a recruitment point of view, Larson-Simpson tries to balance off from an equity point of view, and we're not finding it. We're struggling to find female engineers and scientists. That's the main reason behind Larson-Simpson's involvement for us [in education].

Don does not suggest that all students are unprepared but suggests that business' perception is that students generally are not as ready as they ought to be for the workforce. This point stands as a great divide between business and education, as business claims that students "tend not to be in synch" while educators disagree. Another potential difficulty is that not all students go on to further education or into technology-oriented careers that might demand greater skill sets than schools may be capable of developing. But the implication of what he is saying strikes at the heart of education's purposes. Consistently throughout the interviews with business the message was that, as Don put it, students "tend not to be in synch (with the needs of the present or future workforce]." One means of ensuring that educators become relevant about the workplace is to try to educate the educators through working with individual teachers who would theoretically help others until the message permeated the education system. However, such efforts were found to be problematic also because of the "political situation within the school system." In other words, the expectations of education, like the expectations of partnerships, can be derailed by "different agendas going around."

Bob (B) also wanted to see the inclusion of more small businesses in partnerships, not just larger corporations. He stated: "One of the real tough nuts that has to be cracked is small business, because small business is a hugely important part

of the economy, but they're not very visible in education partnerships. They don't have the time, they don't have the dollars, but a way has to be found in getting these people involved. They're usually a first employer for a lot of kids. They're highly visible in the community." Despite their resource limitations, the significant factor with small businesses is that they are a mainstay for most adolescents seeking their first job experience.

However, some of the realities faced by small business have to do with the operations and practical routine that sometimes prohibit or impede partnering. For example, Jens (B) indicated that even though his company was involved with Bellevue School District in placing students for the Province's mandated work experience credit for high school students, the nature of his particular business restricted the number of students who could be placed there. Such placements also proved a strain on company resources, primarily personnel. He explained that, "it's unfortunate, but the hectic pace and set up of the factory [made it prohibitive for including people who] lacked the ready skills and knowledge about what to do next." Jens' account not only illustrates small business limitations, but also shows how some businesses are not set up for partnering with K-12 education. Resource limitations strike businesses too, as we saw earlier in Bob's (B) example, and sometimes the systemic structure of a particular workplace may be inappropriate for partnering. In this case the expectations of government and education that businesses could be great opportunities for students to gain valuable work. experience are sometimes impossible given the size or nature of some businesses.

After some discussion about their own experience in a partnership I asked

Mike (B) and Greg (B) about the expectation inherent in the time put in by business:

"Is it fair to put a dollar value on the time spent?" Mike figured that, "on an annual basis, we're well into \$100,000, what you call 'in kind." That is, although no actual money was paid out to "volunteers," the efforts put forth by SkyHigh participants could represent that sum, especially for the company. Greg added: "I go twice a month into the school on Saturdays to work with the kids. A couple of other mechanics in the [company] come down with me, because [the school contact] can't do it all himself. So, we're supporting him with our mechanics [and the] material we send, training aids we send, expertise." Bob (B) had indicated that working on an education partnership cut into an employee's time at his or her own job. For Mike and Greg this "in kind" value was swallowed by the company and by the participants whose efforts were on company time and sometimes on their own time.

Educators' Perceptions of Partnerships and Expectations

On a somewhat tangential but related topic, one that introduced possibilities in partnering, Bill (E) stated:

Practically for business to be able to [partner with education] would be so difficult. But this notion of school and the real world, the workplace and the school place, etc., has had its day. It had its time in a highly industrialized era where you wouldn't have wanted a blending, really, between school and the workplace at that time, honestly, because it would have been so confining in either direction. So, the flow now of learning in the area of personal as well as professional as well as down right practical development is truly a working lifelong, social and citizenship lifelong process. It would make tremendous sense both to the social mandate around education for the sake of ongoing civilization, as well as the practical mandate of real preparedness for the sustaining of an economy, and the furthering of ourselves economically to have business connected as both the educated and the educating in such discreet areas as their direct involvement in the construction of curriculum. Now, I'm talking about not set curriculum, I'm talking about the notion of constructive curriculum where the curriculum is building and refining itself, and changing itself according to what that shared, business-educator experience is. But, the classroom and the teacher within the classroom, has to become the clearinghouse of learning experiences that are most appropriate to that curriculum. They should be learning from what is being discovered

within a classroom and they should be contributing to that learning at the same time.

Bill's elaboration of curriculum matters constantly evolving as per the needs of society, a constructivist or organic ideal, is recognizably complex as he considers the practice of educators. It is this inclusion of educators' interpretations of curriculum that sets his view apart from the rest of the interviewees. Business and education, it appears, have something to gain from a collaborative arrangement that would see communication and implementation of ideas germane to the students' learning environment and useful for business' requirements. Diverging from those educators' who expressed a limited relationship with business, Bill sees an open practice that accommodates most of the expectations of partnerships expressed by the interviewees. He finished his explanation with the following:

I told you this was idealistic, but even the smallest amount of that [partnering] is going to fire the right synapses that are now prevented from being fired in so many ways because we're still stuck in the institution, the distinctions that are arbitrarily made between the classroom and the real world [or] teachers, and then the [business] people that really do it, that kind of thing. I'm just talking about doing all the incremental things as they become possible to break down that distinction and make the learning connections.

The irony of Bill's views is that in the practice of education, educators, and particularly their unions, tend to continue what he calls the "institution." Bill's expectations, though mostly convergent with business, are by his own admission idealistic. That is not to say that they are impossible, only that they present a difficult challenge to the linear process of education.

Of all the educators interviewed, Bill (E) most comprehensively articulated the opportunities between education and business, which in turn provide points of convergence with much of what business was saying. Here again is mention of the

distinction between school and life outside school, or what other participants called the "real world." His expectation that business should be involved in collaborations on curriculum development meets with resistance, however, from the majority of educators, who see only strictly limited relationship at most with business, preferably business providing funding support to education without restrictions or obligations.

Robin (E), on the other hand, found that business was sometimes unrealistic in its expectations of education. He shared the following:

A problem—not a negative—is the fact that sometimes business is a little bit out of touch with, or I feel missed the mark, as to what I am trying to accomplish as an educator, that an educational experience for students is different than a work placement. Sometimes employers want to treat it like the student is like an employee and we are going to get the "reality sandwich." I have had that instance a few times, usually with a small businesses, not with the larger organizations, for individuals who own the business have very strong views about what students should be, what young kids today should be like, and so forth. And they try to run kids through a bit of a reality sandwich. But for the most part I found that in my approach I kind of head that off at the pass. We talk about the constant being an educational experience and that no matter what happens, there has to be an element of learning that comes out of this.

Robin drew his perceptions from his actual experiences as a business education teacher and working with businesses in his community. He was not perplexed about his experiences with the business community but simply raised it as a point that he had to "correct" from time to time.

Carrie (E) offered the following insights about the expectations of education partnering with business, almost as a caveat to business:

I think that [problems like we had with students not showing up for class] is one of the things that is going to cost time for your business. You are going to have to look at some reason why you are doing it because I don't think it is going to show up on a spreadsheet...I don't think you could ever track [increases in the number of people who now use that business service]. For example, [with] Gullivers Travel, anybody who phones and says that they heard about [this service] from [the school], then they kick back 2 percent of whatever the sale of the ticket is to our scholarship [fund]. That is something

that they are able to track: how much the public is coming to them as a result of any kind of attention that they got through [the school]. And then we are benefiting in the sense they are creating our [programme] scholarship. I think you have to do it out of some other reason than it's going to increase sales for whatever company you are.

The realistic anticipation that there will be problems in a partnership has been touched on in previous sections and chapters. What is helpful in Carrie's observation relates to the systemic structure of education where students' behavior and commitment to learning may diverge from expectations of the partnering organization or business. In this case the "win-win" meant more money in the school scholarship coffers while business gained increased exposure. What is not mentioned is whether these win-win expectations were matters of public consideration and participation, as the partnership itself—with an educational institution—must be seen as a public act.

Eunice (E) raised the topic of purposes and politics for partnerships. She declared:

There is no point [to] the two [cultures] drawing up things distinctly because our kids are eventually going to end up in the work world. So they need to know what we're doing and we need to know what their requirements are...I think sometimes that the problem [the] two communities are kind of distinct is that business gets somebody that can't read and they think, "All those damn teachers! What the hell are they doing?" Or teachers think that business is too tough for kids to sort of get involved in different things.

Other interviewees also suggested some form of ongoing communication between the two cultures. The rationale is that if the two cultures communicate with one another—about the world of work and of education—then the problems of student preparation for the workforce and the incorrect perceptions of business would be eliminated.

Blair (E) was the school contact person for the avionics program and remained in constant contact with his business partner. At one point during my conversation with Blair, I asked him to comment on what he thought was the cost to business coming into school for a project. He replied:

I figured out that this guy at [company] should be getting about \$420 a day for every eight hours that I spend with him. Now that is time that [he should be spending working for the company]. [Industry] cannot afford to have somebody [such as an educator] go in [to the business] that doesn't know how industry runs and pick his brains at \$420 a day. They've got to have somebody that can go in and say, "This is what we're thinking about in education. How does it fit in with what you're thinking about in industry?" If we stack that in days, we've got five grand tied up in business educating the educators. Business does not want to educate the educators. That's not what they'ré in business for. They cannot afford to do that, especially in these economic times. What education needs to understand is that they want to be sending people out into the business world that aren't going to ask the elementary questions. That's where education fails; they don't understand, they don't put a dollar value [on business involvement] because they've had in the back of their heads that money is coming down anyway. So, that's where that welfare state [metaphor that I used before] comes from. [Teachers] don't think of it as, "This is what it's going to cost." Now everybody can tell you what it costs to get a TOC [Teacher-on-Call, or substitute teacher], so they do have some understanding about it. But they get [their pay stub] in their [mailboxes] twice a month and that's economics to them.

Some of the other educators seemed to have an understanding that there was a cost to business giving its time for education. Carrie (E), for instance, remarked as much, as she spoke of her concern that Chantal (B) be able to leave the school with a sense of having accomplished something with her time. However, as Blair implies, not all educators accept this idea of business value. In fact educators were unsympathetic toward, even scoffed at, "in kind" cost by business, claiming that business could "write that off [on taxes]." Marvin (E), who was not part of the sample group but who discussed the topic of business-education partnerships with me, responded to this business cost: "How can you put that price on it? I don't buy it!" The diverse

expectations of the cost of involvement to business (no one mentioned the cost to education), although obvious to business and those who have had experience in business, are apparently a foreign concept to education. What is missing from Blair's perception is the understanding that not all businesses have the same luxury of time, that there are workers who, like educators, function in a restrictive arrangement that might preclude their involvement outside of their domain, in which case his example is more of a convergent point with business.

We can also see from Blair's (E) comments a point of convergence with views expressed earlier about the two systems in communication with one another and education taking the initiative to approach education. He adds additional information that provides other systemic elements, those of business' time and educators communicating their actual needs to business. Here the implication is that business has a particular focus that does not and should not include prying into education to discover what is required.

Students' Perceptions of Partnerships and Expectations

The interviewed students had little to say about expectations. They tended to comment on educational relevancy. For example, Dave (S) believed that business "and the community in general" should be involved together in education, while Jason (S) thought there should be "more real life situations that we're going to encounter." These statements converge with those made by business and some of the educators about gaining experience in the "real world." Though somewhat simplistic, there is a consistent perception throughout these interviews that society, as expressed through business or the local community, should participate more in

education in order to ensure that students are not shocked by the transition between school and life after school.

Huang (S) believed that "in schools [businesses] largely do advertising instead of education." Steve (S), on the other hand, suggested that, "it might be good to have some work time, you know, where a student can actually get out and job shadow someone to see what it's like in the workplace. I'm not sure how realistic it is, but it would be nice to have [businesses] help fund some of the technologies that we use at school." I have commented at length already about this problem of technology in the school and the reality of budgets and decision-making. Here is where student involvement in some capacity could positively benefit businesseducation partnerships.

Partnership Boundaries

There are limits to partnering arrangements between the systems of education and of business. In some cases these arrangements are practical, or resource dependent, and in other cases they seem to be no more than a political move. In this section, I analyze the responses of the participants regarding the boundaries or limits of partnering. Out of the responses given I noted elements of political maneuverings, which I have also included here. The questions that I asked participants about the limits of partnering together were as follows (continuing from the previous questions in the Interview Schedule):

4) In what ways, if any, should the business community be involved in public education beyond assisting with resources (i.e., equipment or funding for school activities; goods/services)?

5) When or where do the lines or boundaries need to be drawn? Who should draw them?

Business' Perceptions of Partnership Boundaries

Karen (B) focused on the marketing aspect of business. She said: "I don't think it's business' place to actually go in and the primary objective is to have the logo placed somewhere... As soon as one starts to get taken advantage of, then I think the line needs to be drawn." I asked her if her view was representative of SportShoe Canada. She answered: "I would say that's really my perspective on it. I know that obviously SportShoe Canada gets very involved with schools, particularly with their sports programs, and that's definitely win-win." Karen's perspective was similar to the remaining business participants'. There was a definite sense that business' place in education was to seek a beneficiary position for both parties, but nowhere did l sense that the deliberate exploitation of students as a new market was the motive. The Material-Financial Resources partnership that I mentioned in a previous chapter that Bellevue School District was negotiating with a cold beverage supplier, which they chose to call a sponsorship, is indicative of exclusive partnership arrangements that some industries have, or seek, that have as a primary motive a monopoly on a market. This is not to say that such an arrangement is not a win-win arrangement, only that the motive is not for the enhancement of student learning.

In a brief description of his own experiences with the politics and limits of partnering, Bob (B) explained:

I have over the years had to have the same fight over and over again with some people, and that is that we can't [politicize the classroom]. The forest industry [for example] cannot use the classroom to have kids battle the environmental community. It's wrong if the environmentalists do that. Two wrongs don't make a right. If you're going to go into the classroom, go into

the classroom with curriculum-specific materials, something that matches what's happening in the class. Do not use the class as an extension of your media campaign. Now there's a minority of people, thankfully, that have that view, but it's something that I don't enjoy because it, to me, to use that cliché, it's negative energy. There's so much that has to be done in the classroom, and so much that business can bring to the classroom, we can't be dealing with this peripheral stuff.

Bob kept returning to these themes of needs in education and that business has much that it could bring to education. Continuing with the idea of where to restrict the partnership he stated:

I think you draw the line when in any situation where the school is being used as either an ideological focus group for a corporate agenda, or any interest group's agenda for that matter, and you draw the line if the school is being used as a marketing apparatus in a direct way. There's a good body of knowledge out there that's been developed by Conference Board, BCTF [British Columbia Teachers Federation], and others. There's a good gate keeping in place and over and above that you can't short-sell the kids.

Agreeing with Bob, businesses in this study unanimously rejected crass commercialism and marketing in the classroom. Although representing in some cases multinational corporations, their message stayed the same. That is, business and interest groups flaunting their ideology had no business turning school into politically charged support groups for their particular cause. The educators interviewed were all in agreement but most harbored skepticism towards business' claims. Witness the case of Mason Good Investments that worked with students to print and distribute the information brochures in the same school district.

Bob (B) recounted the following story as an illustration of his experience regarding partnership boundaries:

I want to paraphrase this kid. One kid in one of the essays put it quite well. He said, "We expect—we're not foolish—we expect that when a corporation comes into the classroom they're going to mention their product, that it's pretty hard for them to come in and not do it. But," he said, "we're here to learn, and when they come into the classroom, they should be helping us

with that." That's basically what this kid said and he won first prize [in the essay-writing contest that I set up with them], because I thought he was right, because he was realistic. You're not going to have [Guzzle Beverages] walk into the classroom and not mention their product. I think there has to be honesty there. I have a meeting later this morning with a large media organization that wants to get involved in the school system and I've told them that they have to say to the kids that the reason they want to do that is because they want to sell more newspapers five to ten years from now. Don't try to scam the kids into saying you're in the classroom because you've got a sense of higher social purpose and all of a sudden the people of the newspaper sat around deciding kids were wonderful. It's long-range marketing. That's not a bad thing, but be up front and say it, because the wheels fall off if you don't.

Bob's point, that the bottom line for business arrangements with education should be about helping students learn, is a powerful one in the discussion of business-education partnerships and convergent with the OECD's (Carnoy, 1997) suggestion about education and community collaboration. At the core of this bottom line is an attuned focus on education rather than profits first. At the same time perceptions of the purposes of education and of the systemic factors that interpret and drive education make it difficult to ascertain not only what to learn but how the systems of business and education could go about determining the systemic factors. Bob added this personal story of how he instigated an essay-writing contest with a grade 12 class to which he had been invited to illustrate the students' perspective on partnership boundaries:

I got sixty essays and the theme of the essay is, "What business should and should not do in the classroom." It made an interesting read, and it was pretty clear to me that these kids have pretty good instincts in terms of what's acceptable and what isn't. And [if] a company, or for that matter an environmental group, or a political group, or whatever, at their own peril would go into a classroom today and go overboard in terms of either an ideological or product message, kids would reject that. So, in addition to all the other fine documents that are up on walls, the kids are a pretty good check system.

To include students as part of the partnership process—one possible boundary check—seems a novel concept. Indeed, the information that I examined in preparation for this study nowhere suggested this possibility. There may be issues around purposes of education and the limits of partnerships, but the overall perception of business in this group was supportive of the idea that business' approach to education should be free of exploitation and respectful of the classroom as a place of learning.⁵⁰

Educators' Perceptions of Partnership Boundaries

Robin's (E) perception of the politics of partnering, tempered perhaps by the constraints of Career and Personal Planning (CAPP), was positive. He said:

I have hardly any problems. Other issues that have been good relate to the willingness of organizations to cooperate. They're quite willing to be dictated to from me. They lead and they know that I'm an educator and they respect that, and they'll give me leeway as to how I would like to set up the relationship. And so I found them to be very gracious and respectful of what I have been doing.

Robin portrays a side of business that diverges with what business, for example, had to say about its own relationship with education. In this case, though, Robin is speaking about his relationships via the provincially approved CAPP program and in his small community. He was able to establish the criteria for these relationships as well as the boundaries in which they would operate. But CAPP also restricts the sense in which the relationships with business could be construed as partnerships. These are not about business collaborating with education on education's ground,

⁵⁰ In the earlier example of Bellevue District's committee to deal with the partnership with Guzzle Beverages, two students formed part of that committee, but in what capacity beyond sample representatives from students I do not know.

but about arrangements whereby students enter workplaces for specified durations and without pay in order to gain some first-hand experience.

Carrie (E) articulated perhaps the most straightforward details about the politics of, and in, business-education partnerships, at least in so far as each culture understands the other's restrictions:

Certainly I have come in and told [Chantal (B)] all the things we can and cannot do from this end, and then she has told me all the things that we can and cannot do from her end, and then we found middle ground there. For sure we have a business collaboration and she has often come and spoken to the kids after school or have them meet her at Gulliver's [Travel]. I just think that there is a lot of hoop jumping that you have to go through and if you can get through that—and whoever was in the partnership [if] that was the way they looked at it as a partnership. But don't get me wrong, I don't think that people in business can't teach, I think that they are wonderful teachers but it isn't the teaching skills, it is the [school] board policy.

Here Carrie has outlined the boundaries that she and Chantal have drawn in a partnership, and have had to draw because of bureaucratic demands, and challenged perceptions of who decides for teachers as well as the steps necessary for partnering. Her description diverges somewhat from the experiences that some of the other participants had of partnering. Although school boards may have a policy in place, we saw that there is a contrary perception from business. Furthermore, Carrie's own teachers union is adamant that only trained teachers should be in the classroom, thereby eliminating outsider "teachers." It is not therefore a school board decision.

Carrie (E) also shared an example of a brief partnership arrangement that benefited her, the students and, no doubt, the partnering company. She explained:

We had Dale Carnegie, for example, interested in coming in and they did do a program with our kids, sort of a student Dale Carnegie program on communication and stuff. The Dale Carnegie program is quite expensive so they were able to subsidize that with scholarships that Dale Carnegie went

out and sought and then they came here. If I hadn't been here they would have been charged time [to use the school] because it was rental. If I supported it then it is not a rental because they are not an employee of the board, therefore, they are not covered insurance wise.

If you can somehow get around that I think that the union's concern would be that we are going to so dilute ourselves that it doesn't really matter if our administrators have ever had teaching experience—they just have a Masters Degree in Administration—and is this really going to affect it better or not? But I think that I would really be surprised if we could ever turn a class over to them. I would be happy to do that but I think that there are so many things that they would have to go through. If all of that was fine and all of the union stuff was fine, then great.

Carrie's story serves two purposes. It gives an example of business helping education at its own expense and it challenges some of the thinking (and practices) in education from which business is barred. Her observance about the teachers' exclusive claim to the classroom is another critical point in a larger discussion of "professionalism." Outsiders are prevented from taking on the teacher's complete role largely because of the "union stuff." Of course most workplaces demand some kind of special preparation beforehand, either the trades or the higher professions, such as medicine or law.

Concerning the perceived incongruities surrounding partnerships, Kris (E) expressed his view a little more strongly than Carrie (E) did:

I see a total farcical argument going on right now in this school district about this business in the workplace, all the companies that want to come and sell their products in the schools. And [Guzzle Beverages] company wants to get their primary contracts [to which some teachers react,] "Oh, this is bad, theologically, this is bad!" And I go, "Every kid in our school is a walking billboard, marketing some company. Where is this going to hurt the kids at all? How is this going to interfere with their education process?" There's untapped resources there, huge levels of resources that are available, and I think the business world would be interested in getting in, like they did 15 years ago when they started to make the push into the universities in Canada...[The universities are] not complaining and I don't think they see a bit of badness in that at all.

He was able to see that business was willing to pay, and pay handsomely, for partnership arrangements. In some, if not in most cases, the transition to formal partnerships would be virtually unnoticeable given the free advertising taking place *via* clothing that people—not just "every kid"—currently wear throughout just North America, for example. The concern that business-education partnerships might be a bad thing seems overridden by the rewards. Kris saw a place for business in education, including corporate sponsorships. Although not all the educators interviewed would agree with him, the majority seemed to invite business and education partnering in some manner.

Robin (E), for example, seemed more inclined to merely have business and educators interact regularly almost as a professional development activity for educators, which converges with what some of the other interviewees also mentioned. He stated:

I think that it would be really useful for people in schools to be going out, to job shadow, visit work sites and to talk with people...so the people could start exchanging information with each other. That would go so far. I think there would be over time a kind of evolution process to start to take place. People would start understanding [business]. I think teachers would find it easier to bring relevancy to their classroom...Then [the two cultures could] discuss the ways in which the schools can use these businesses.

I see that, for me just to look at organizations of community as ways for me to enhance my curriculum and for me to develop relationships...I don't want to get into businesses throwing lots of money at schools...I think [businesses] would find a real morale booster and I think they'd also find the value of good will. Schools need to know how to create good will for businesses. That is, thanking them in the newspapers, making public announcements, and being gracious acceptors and promoters of that interaction.

Robin often spoke of the relational union of business and education, as opposed to the straight forward funding of schools. In the same way as Kris (E), Robin thought that the inclusion of business as an information provider as well as relationship

builder has more importance. A result of these relationships is that educators, he says, will be able to "bring relevancy to their classroom." For him the bounds of partnering together are fixed to relationships, much like close neighbors in a sharing and caring community. Diverging from Kris, for example, Robin believes that the presence of business in school for any reason other than information assistance and relationship building will be an opportunity for business to exploit yet another organization. He also implies that education is a special sanctuary from exploitive systems, such as business, and by extension that educators are the guardians of that sanctuary. Protectionism is an implicit part, then, of the educator's role.

1. Bis 3. 1

Aaron (E) suggested that, "it would be good enough if businesses gave [schools] resources [and] provided support advertisements about how you will need post secondary education in order to get into a successful business world." The implication that partnerships be informational arrangements for students entering the workplace in the future has sympathizers in education. As such, business could be controlled in its collaboration with education. The implications of Aaron's beliefs are that education and business need to be limited in their interaction and that education is able to ensure it will do an adequate job of preparing young people for life beyond school.

On this note of limiting business' involvement in education, one education administrator in another school district,⁵¹ Wendell (E), was adamant that, "business has no place in school." There was no discussion. Simply put, business and education are completely incompatible. This was the same administrator who, as the IT

⁵¹ This dialogue transpired during the collection of data for my evaluation report of the ITM program (Després, 1996a).

decision-maker for his high school, had made a public presentation, at which I was a guest speaker, about improving IT and education using typed script on overheads to make his points. His talk came after another presenter who had used a live connection to the Internet and a PowerPoint presentation to impress upon the parents and adults in the room the need for the school to become more relevant in the global economy and better IT-equipped. The points I want to make here are that in education there are proponents of collaborative partnerships with business and there are those with an opposing view, and there is a range of not only perceptions of partnering but of educators whose understanding of partnership possibilities may be rather narrowly defined.

Continuing with the boundaries in a partnership, Robin (E) immediately suggested, contrary to Aaron's (E) view:

Advertising, I have a problem with that. I think that it is an issue that is a very touchy one. I don't think businesses should be in your [school]...I mean one thing you can see already with the example of the media. The media at best is totally discredited. The media as has come to light about how much power businesses have over media. That would be absolutely a disaster if that would have happened [sic] in education, that sense of tonality of education. [Education] is an institution in our society that needs to be protected from those types of industry.

Kris (E) was a little more vocal about corporate inclusion in the school and the resident politicizing. He argued:

Where would it hurt our school system? I don't see it hurting our school system. Where it hurts is the bureaucratic nonsense that we feel we have to create some kind of program to justify our business relationship. So we get these ridiculous things like Career And Personal Planning [CAPP], where CAPP is nothing more than a reworked business-ed[ucation] 10. Who teaches CAPP? It's a throwaway course taught by the teachers we need to teach two classes of science and one class of French. What are we going to do; we want to keep this teacher in our school, so let's give him CAPP. We'll give him three blocks of CAPP, and then we're able to keep this teacher. I mean that's totally nonsense right from the get-go. It's not teaching what the business world

wants and it's creating an aversion on the part of the students because there is no solid course there. And that's the government answer to, "this is what the business world wants. We've listened to them and now we're responded. Aren't we good?" That's frustrating to see that kind of knee-jerk reaction.

Kris' message seems to be that business is good, but education administration is bad for education. There is also a sense in which teachers who continue to put up with this type of assignment, both the ones accepting to teach in such conditions and the remainder in a school who see it going on and remain silent, are somehow culpable in the making of their own roles and in the way they may be perceived by outsiders. On top of that Robin cast CAPP in such a disparaging light that he undermines its merit. As a mere government agenda in response to business demands, one could question CAPP's usefulness. This divergent view of Kris', however, raises more questions about his view as well as about educational responses to business demands.

Otto (E) provided a more critical look at the nature of partnerships than any of the other interviewees. His initial response to the question of whether business and education should enter into partnership arrangements was: "No. Well, in the broad sense, no. I believe the government should pour billions more into education.

Education should not be needing money." His comment makes sense in the grand context of publicly financed education. On a practical level, though, as has been experienced in Ontario, Nova Scotia and British Columbia recently, governments allocate funds for education, which have been declining, as some argue, to the detriment of education. Otto's point does raise the question about the future of education. If public, then funding issues need to be addressed. If alternative

financing arrangements are to be made, then education runs the risk of diluting its "public" purpose.

On the subject of funding, Otto (E) remarked:

4. 2.

Well, I see business and education coming together because of a lack of finances. If education had as much money as they needed and somebody still thought, "Hey, that's a good idea. Let's work with IBM because..." then that's fine. It's the notion of funding that I find is problematic and then we rationalize all these other reasons for it. But basically it's funding. If business believes in education, then they should give money to a general pot in education and...then the ministry, or whatever, whoever's in charge can do whatever they want with it. I don't believe in those sort of very close connections between a particular corporation and a particular school or a district: "Okay, what are you doing with my money and where am I in there and how visible am I in this thing?" I don't see that as beneficial. Now, if it does happen—and it does happen because we have to live with reality—I think that we need to engage that issue in the school...and we don't. The whole conversation has been silenced by the institution. Let's bring it in and look at it, and how problematic is it, what do we get from it, and those kinds of things. Then that's okay just like I don't mind commercials in the classroom if they are looked at critically. But just to have [business partnering with education], I have a problem with that. I have a problem with the strings attached even if there aren't direct strings attached.

On the one hand he says there should be no partnerships and that the government has a responsibility to fund education. Yet on the other he suggests that an alternative to partnering would be an education "pot" to which business could contribute condition free. His persistent call for crucial examination in education, including partnerships, or advertising, points the way to "just-in-time-learning," as well as to developing the skills of reflection and problem analysis. The boundary for Otto, then, seems to be the motive for funding education. He moves the consideration of partnering to a level of critical examination that would benefit the institution as well as the advancement of learning.

As for who should draw partnership lines, Ferdinand (E) suggested:

Ideally it would be teachers. But teachers are generally too busy to be involved in that sort of thing. So, I guess it would come down to the higher people, the district people that are consultants who have time to think about that and interact with business a bit more. And, I guess, Ministry [of Education] people if that's what they are able to do, I don't know. I don't know what they do.

On a similar level, Aaron (E) quickly offered, "The Ministry of Education" as the policy agency to determine the boundaries of business-education partnerships. Ferdinand's cynicism about the government's understanding of and inclusion in the partnership process converges with Kris' (E) viewpoint as well. If this convergence in thinking exists among educators, then there are two additional problem sets in the business-education partnership process: There is the negative perception of the government's role in education which may have a detrimental effect on partnering. Related to this is the second issue about the lack of educators' imput in the decision-making process.

Eunice (E), who questioned the decision-making process for partnering with business, said: "Corporate sponsorship...wouldn't particularly bother me if it wasn't imposed on a school, if it was a negotiated discussion. Sometimes teachers appear reactionary but I think it's just if people are involved in the process and they had input, that it may or may not be a bit different, a good thing in different circumstances." Pushed further about who should draw the line in a partnership arrangement, she answered: "I suppose ultimately it would be the school because we are the ones that kind of carry the candle...When business gives us scholarships and bursaries that's corporate sponsorship. It's just we never identify it as that. We'll use them when we want to, when we want the money for our kids. That's sort of accepted as part of the culture. We take their money." Educators unabashedly accept business handouts, according to Eunice, as a natural function of educational culture.

Furthermore she implies that partnership arrangements would likely be successful if educators were part of the decision-making process. Her inclusion of schools in the adjudication of partnership boundaries finds a similar voice in Ferdinand (E), whose perceptions we saw above. He thought:

Business should have some part in at least recommending curriculum. I'm not saying they should have any control over it. They should be involved in what the curriculum consists of especially the senior years. Some correspondence between what we do in school and what the students will need when they get into the workplace. Some say some advisory role in the actual development of curriculum, not control, but an input, whether it is to review what is recommended and make some suggestions or something like that.

Here is a further point of convergence among a number of the participants, both in business and education. At least Ferdinand's view invites a more systemic-oriented beginning point from which partnerships could entertain possibilities, if only limited ones. It is obvious, though, that the role of business in education is still unclear and is no more than an in-class informational arrangement. Allowing business even near the curriculum, however, would invite concerns from other educators with whom I have spoken on the subject of business-education partnerships. Ferdinand clarified with further details:

I wouldn't want [business] to take control over writing curriculum because I would be worried that they be too self-centered in a way. The last thing I would want to see is schools going into factories to turn out little workers for the businesses. We have to prepare students for the long haul, in life's long haul, and business is directed more at the bottom line and the immediate employment situation. So, I draw the line at giving them any control over the curriculum, but I would still like to see them have input.

He touches on educational purposes. Education should not be connected to the workforce to produce skilled workers for specific jobs, a point maintained by the other educators.

Educators, however, expressed degrees of acceptance of business involvement in education. Note, for example, Bill's (E) answer to the question of when and where to draw the lines:

Well, the first line that I would draw would be in the area of what is maybe sort of the classic entrepreneurial prerogative that says the profit margin comes first. That can't come first on the basis of principle. So, the line would be drawn where it was clear that was predominating over business' sense of being involved with education. In other words [when] they were bringing more, what I would call, of a mercenary sense of that relationship to the extent that it "contributes to our profit margin, raises our profile," etc., [or] "We will be involved or otherwise we won't," and a certain amount of that has to be understood because that's part of business culture.

Bill is not condemning business for its "entrepreneurial prerogative" but is mindful of the student and learning, or the "principle" of education. This attitude is shared, as should be clear, by the business participants. At issue, then, is not so much the principle but how best to be mindful of that principle, and this is an area, much like a number of others, in which the educators are themselves not in a state of agreement.

The educators whom I interviewed were varied in their views about the limits of partnering, from zero tolerance to embraced collaboration with possibilities for marketing in the school. Bill (E) expanded on his view:

The other [line to draw] is a control of quality. The role models that young people are exposed to, their manners as well as their sophistication and all those kinds of the things, there has to be a baseline with that. It's not just a sort of come one, come all. So, that may be a line that that would have to be drawn from a standpoint of who's becoming engaged for what reasons. Apart from that I don't see any sort of institutional-cum-professional territorial line that needs to be drawn. I think some others would go further with that.

Here Bill refines the details of partnerships as demonstrating first and foremost the necessary skill sets required for current workplaces. The line is to be drawn at the type of business permitted to come into schools. A curious point, however, is that at the same time Guzzle Beverages was slated to be the exclusive provider of cold

beverages to Bill's school district, clearly a contribution "to our profit margin" that would see increased funds made available to the district.

Carrie (E) drew limits to partnerships. She explained: "I think that we have to be conscientous of our association contracts that they can't really come in and teach. Although I think they could be more involved if they could free themselves up from their business to come in as guest speakers." The crucial point behind these words is the demarcation line Carrie draws for the limits of partnerships: Businesspersons cannot teach. They are welcomed "guest speakers" but open teaching pushes the limits of educational practice and acceptance. Given Chantal's (B) involvement, however, I wonder about this limitation. In effect, some of what she was doing with the classes could easily be construed as at least co-teaching. That is how Carrie originally explained the partnership. Carrie was not suggesting that business lacked the ability to teach. The problem lay with her union that decided upon credentials that should be in place for anyone wanting to teach in public schools.

Kris (E) believed that the role of business in education should not be about marketing their products. He emphasized: "Business should not be trying to sell something to us...I don't think there is such a thing as benevolence in business. There has to be a gain or purpose for the business, whether it's an opportunity to get good young people to work in their company...there's nothing wrong with that." Kris recognizes what he sees as the nature of business and is willing to draw a line at the sales job while recognizing that business's pursuit of opportunities may benefit the students. Other educators interviewed, for the most part, either expressed disdain for the utilitarian, industrial model of education as a preparation ground for future

workers or reacted against business involvement in education for anything more than guidance sessions about the world of work.

Otto (E) was the one to pick up on this theme of exclusivity most clearly: "How about lawyers? Why not lawyers work with schools? Why businesses? I don't understand." When I explained that I meant business in a broad sense. Otto challenged:

But it's not so broad as you think. It's corporations working with school. We don't have the doctors associations of BC working with schools. We don't have anybody else. It's just these capitalist kind of corporations that have money and want to advertise or whatever [that] want kids to get to know them. That's why they do it. If we worked with everybody, then I'd say, "Well, maybe!" But we don't. We don't work with social workers in schools; we don't with anybody who actually has something to help society. We work with people who take stuff out of society and who want to take more out of society.

While all the other interviewees discussed the bounds of partnering, Otto scrutinized the arbitrary line that seemingly bars certain groups from participating, and bars them for other than financial or material motives. He implies that education is the gatekeeper that disallows most groups from participating in education, which would provide broader perspectives for students about workplaces. However, the marginalization of groups from education likely has less to do with deliberate policy making.

Students' Perceptions of Partnership Boundaries

Students were not as sure about the limits of partnership involvement. Some interviewees were not able to answer the question while Jason (S) and Dave (S) were the only ones to be definitive. Jason, for example, thought that partnership arrangement boundaries should be decided through "collaboration between students and administration," whereas Steve (S), representative of the unsure

students, vaguely offered: "Well, schools can't be too much like the workplace." This idea converges with what some of the educators and business were saying.

On the other hand, this inclusion of students in the discussion of business-education partnership boundaries is unique among the interviewees. I think that stands out as a powerful statement about the nature of education and the politics of business-education partnerships. That is to say, students, despite their significant place in education, may often find themselves as "sheep" rather than as learning critical voices in the systemic environment of education.

Final Analysis

Systemic Factors in Business-Education Partnership Purposes

The purposes of business-education partnerships range from collaborative projects, such as Bill's (E) curriculum development, to business providing information to students. The "win-win" philosophy is part of business' interest and obviously includes, in some cases, a profit advantage for business, a view that is clearly part of the business ethic. As we saw in Chapters Two and Three, business unlike education (for the most part), operates in a world of competition and must struggle to survive. The nature of the advantage or benefit from partnership for both parties is worth examining at the onset of any partnership process. The "bottom line" for business-education partnerships, according to the Conference Board (M. R. Bloom, 1993, 1997) that we saw in Chapter Two, is the enhancement of student learning. There are no clear guidelines from the perspectives of the participants, except that the

⁵² Recall the episode of the high school basketball player who transferred from one school to another because he had been offered a basketball "scholarship."

partnership must not be exploitive of the students (or the teachers) as a captive audience.

The businesses interviewed indicated no interest in supplanting teachers or supplementing their regular duties. Time and profits certainly would preclude regular teaching duties alongside other teachers. Blair (E), defending business, however, argued, "[business has] got the expertise. Industry is willing to send people in the schools to show how things are done and to teach them skills. I haven't bumped into anybody yet in industry that isn't willing, unless things are particularly tight in that company or they're really busy." Providing demonstrations or work-related information is a task that business is prepared to accommodate when it can. The problem of resistance to outsiders coming into education to assist has many perceived causes and not just threatened teaching positions. In fact, only one of the participants mentioned anything about the problem of business assisting with teaching. We can see that the general points of convergence shared by most of the participants here concerns an economy of mutual benefit, but not necessarily an equal benefit along with a respect for a socio-educational purpose over a business purpose.

Systemic Factors in Business-Education Partnership Form/Design

Kris (E) is right, of course, to observe that students—as well as teachers—in

effect advertise daily different products, from the expensive SportShoe running shoes
to the name-emblazoned shirts, jeans and jackets, the wrappers that hold their food
and the means of transportation to get to and from the school. But what is
significant in Robin (E) and Eunice's (E) statements is the belief that teachers are the
quardians against corporate exploitation. Somehow the educator's role carries in it

an implicit expectation to protect students against certain interests outside the walls of the school as mentioned earlier.

I told some of the interviewees that I thought there was a bit of irony in that, "granted, there are no open displays of advertising inside the schools, nevertheless, every kid—and teacher for that matter—is a walking billboard: Nike, Tommy Hilfiger, etc. All these brand names are glaring at everybody. That's sort of a soft side which is acceptable, a sort of a grey area" in so far as worrying about business advertising in schools. Most of the interviewees agreed but offered no rationale or defense. The difference, it seems to me, is one of choice. Deliberate advertising or exclusive contracts would impinge on or preclude choice. As it stands, what one wears is a choice made outside of school. By implication schools are "pure" environments where explicit advertisements are eschewed.

Concerning students gaining valuable work experience, most of the educators interviewed saw the student work experience component of the Province's CAPP program as comprising a partnership arrangement. Robin's (E) experience with business being "out of touch" finds some convergence with, for example, Bob's (B) view that business may believe it understands educational needs based on the experiences in the business world. For example, the CAPP program does operate with businesses as a brief training ground and a learning environment for students. CAPP and full-blown partnership arrangements are all examples of attempted changes to education.

Meanwhile, the politics of decision-making sometimes obstructs the simplest of efforts. After having spoken with upper administration in Bellevue School District, I had to conclude that the lack of donations policy, for example, was an unfortunate

situation. However, Don's (B) perception was that there was no particular policy in place that could enable educators in that district to help them with donations or partnering. Business needs to be aware that a partnership arrangement with education is more than philanthropy, or donations, and that the real profit, as it were, for both sides will come from dialogue about what is involved and how best to proceed. That dialogue, perhaps supported by an independent, business-education group empowered to adjudicate partnership requests, could be a viable option for education to receive steady funding as a supplement to the already dwindling government funded education resources.

On the surface, Bill's (E) partnership experiences, especially the national coalition that he mentioned, was an opportunity for business to discover real issues in education. However, as it stands, the regular meetings appear to be no more than business sharing their latest technologies and education responding. The absence of teachers or other education stakeholders in these meetings ensures a limited understanding of realistic needs or requirements, whether business' or education's. A relevant example is the Microsoft Corporation advertising to educators about their summer training events for learning how to use their current software. In a message that I sent to Microsoft Corporation in response to one such announcement I explained that their offer was sadly shortsighted, because it did not consider, first, that educators have limited funds for their programs and for their professional development and that, second, the average hardware available in schools tends to be outdated or lacking the necessary resources to be able to run their current software. The practical example I gave was the IT department in the Learning Centre where I was working at the time. Of the 19 personal computers in the Centre (one

was a newer Apple), 18 were comprised of older pre-Pentium and Pentium machines operating on Windows 95 or Windows 98. All but two machines had 15" monitor screens. Apart from the three student machines that could possibly run the latest Windows XP or Microsoft Office XP, for example, it was of no use to have the newer software for at least two reasons. First, there was a greater need to have updated equipment that would not be breaking down on a regular basis (or resort to installing a network). The allocated budget for new equipment would allow us to purchase only three new machines. That did not include any software. The second reason was that site licenses for the software used up the largest portion of the budget. We resigned ourselves to "just-in-time" fixing in lieu of "just-in-time" learning. I was trying to impress upon Microsoft that their gesture might demonstrate corporate ignorance of the resource problems endemic to education. 53

Business' commitment to education, programs and partnerships also means follow-through and establishing credibility with educators. I mentioned in a previous chapter that the ITM program had suffered an abrupt termination, leaving a trail of broken commitments and unfinished business. In February, midway through the school year and without warning, the principals of the funding segment that oversaw the ITM program closed the project. The teachers who had been involved in its implementation in their IT classes over the course of three years had reasonable expectations that their time and efforts would mean greater learning benefits for the students. Unfortunately there was no formal explanation given to them about the decision to terminate the project. Students and teachers in this case were abandoned

⁵³ I received no acknowledgement from Microsoft of my message.

just as the program was beginning to enjoy a level of comfort and success. When the funding for the project was stopped, I felt a bit angry at the agency and questioned the ethics of their action, especially given the timing.

In the example of the termination of the ITM project, the negative impact on education was felt deeply by the educators involved. Future endeavors to pursue research in schools run the risk of being stalled or curtailed by doubts of a project's lifespan and complete backing of the investigators. The impact on the routine in education is another factor. Disruptions of the routine of education, even for well-meaning projects, may become a negative characteristic that seriously handicaps education research and partnerships.

Education may also be guilty of truncated projects and lack of commitment. Mike (B) and Greg's (B) uncertainty of the future of SkyHigh's project because it was unclear whether the School Board was going to continue to fund it past that year provides us with an example of educational uncertainty about not fulfilling, or unable to fulfill, its partnership obligations over a long term. It is one thing for educators to sport suspicion around business and partnerships, but it is quite another to have education cast off programs that clearly have a long term benefit for students, or the enhancement of learning. Not only does this touch on systemic purposes of education and research but it is also a problem of systemic form, or the directions and guiding principles of those purposes.

Credentials may also play a part in the success or development of a partnership. Imagine the scenario that Blair (E) depicted or the possible combinations of educators partnering with businesses or organizations in which the participants have diverse levels of educational achievement. Blair's fear is that personal status

might become an issue that could jeopardize positive relationships between business and education. In addition, a failure to acknowledge the significance of the participants' strengths and common goals will likely add additional strain on the relationship and partnership success. At the same time Blair's point may be a minor issue when we consider Carrie's (E) comment about teacher credentials and how these are a seeming moot point or low concern among educators.

Related to the topic of credentials and status is the ongoing learning or professional development practices of education and business. By implication from many of the participants in this study, education partnering with business could provide a possible connection to lifelong learning as well as professional development. Elsewhere I have discussed experiences of partnership arrangements that have had as their main purpose the professional development of both cultures (Forrest, Miller & Fiehn, 1992; Price, 1992). By the same token there are those educators who saw any association with business as highly undesirable and counterproductive to any development, professional or otherwise.

These systemic elements all have an impact in some way on the partnership process. Change brings with it resistance and even, as we saw with Mike (B) and Greg (B), a lengthy time frame before a partnership begins. On the other hand if business and education are to seek partnering together, then the time factor that leads up to the partnership is insignificant compared to the discoveries that would take place through applied systemic thinking.

Systemic Factors in Business-Education Partnership Structure

The time schedule and curriculum constraints along with the pressures of educator accountability increase the likelihood of a "one-size-fits-all" delivery method.

It is, as we saw with Gibbon's (1990) claim, teaching to the test or, according to Cuban (1984) and Lowe (1997), for example, unchanged schooling. The perverse win-win situation here is that the educator "wins" control over a group of adolescents while ensuring a timely delivery of the curriculum and students "win" knowledge and preparation for the tests that will inevitably stand them supposedly prepared for life after school. If educators and administrators perform well—scores and graduate numbers are up—parents and the community are content, which makes for another win-win situation. Some educators with whom I have worked have spoken of this practice as "the game," as though the systemic structure of education could be likened to a set of rules and moves that ensure that most players achieve success, provided one knows and applies the rules. The game can be extended to include business-education partnerships. This win-win philosophy is challenged, however, when either educators or the business community alters their practices, perhaps even innocently. As one example of questionable practices, Mike (B) and Greg (B) believed Bellevue School District was "dumping students" into their project. There may be a reasonable explanation as to why students were allowed to participate in the avionics project. On the other hand, if students were being indisciminantly placed with SkyHigh with a disregard for the purposes of the project, then the issue of ethical practice, or at least clarification of its partnership purposes, would need to be addressed.

again white .

Regarding the time put in by business in a partnership arrangement, I noted that this was an act of philanthropy, that the companies involved allowed their employees to "volunteer" their time (on company time). In comparison, Don (B) offered that there was indeed a financial cost to the company and personal cost to

the individuals for time away from their regular work. While educators scoffed at business' estimate of what this was worth to them, what business was not cognizant of was the amount of volunteer time that educators put in that was not "in kind." Many educators volunteer to participate in, organize or manage extra-curricular school activities, such as arts and sports programs, for which they receive no recompense (in most places in Canada), including in kind. This compares with Greg's (B) Saturday gatherings. This similarity of in kind practices provides us with a valuable point of convergence as well as a point of powerful divergence. On this latter point, educators in some provinces have adopted a "work to rule" ethic in their campaigns to protest government cuts to education funding. This attitude indicates that business-education partnerships may have even greater problems to come, as embittered education unions react to decision-makers' perceived anti-education legislations. But there is another possible divergence. Although business people volunteer time for these partnerships it is during their business time. Educators do not volunteer time to go into business or other organizations on education time. Even extracurricular activities are outside the regular school hours, except for special trips or sports events.

There are a number of issues in the partnerships experienced by these participants. Partnering is not merely a matter of business foisting its marketing strategies on unsuspecting students in return for financing educational programs as many of the educators tended to think. Neither is it a simple practice of business easily dropping everything to assist education without corresponding and complex interconnected problems. Agendas, politics and other systemic structure elements in education collide with alternate elements in business. Don (B) acknowledged the

difficulties that his company encountered when trying to work with education but recognized that educators had a difficult task of educating because of systemic problems in society. Ferdinand (E) had earlier expressed to me that he tended to be hesitant about getting involved with university research programs because "they tend to disrupt other things in the class [and] in the school." This carried over into our conversation about business and education partnering. The systemic structure of education is such that some business-education collaborations might not work or have some kind of negative impact in the school schedule. There are constraints imposed on education through timetables and curriculum delivery expectations. The rigidity of schools' schedules ensures a difficult transition to accommodating changes, which includes business and education partnering together in some areas, such as curriculum collaboration or human support.

Conclusion

Not all educators are timorous about business partnering with education or about exclusive arrangements, or sponsorships, with business. In some cases the administrators determine the arrangement details, soliciting feedback from teachers almost as an addendum to the decision. For example, when I began managing the ITM program, Bellevue School District was seeking some input from teachers on a sponsorship arrangement with a local "cold beverage supplier" in which the District stood to gain a substantial sum of money over the course of a few years. The selection committee was comprised of various school board members and included two students, but no teachers. What is the message to teachers in this case?

From the analyses in this chapter it is not clear that preparations for businesseducation partnerships are well orchestrated. How are business-education partnerships to function properly? Should there be business-education partnerships? How should they be set up? What about ethical deliberations? In other words, who should seek input from whom and who should decide? These and other questions are simple guiding ones that should be in place as part of partnership discussions. In the final chapter I will deal with such questions and more.

PERCEPTIONS OF BUSINESS AND EDUCATION IN PARTNERSHIP: BOUNDARIES, BRIDGES, CONCLUSIONS

The gap that exists between the education system and the world of work needs to be bridged for the sake of both the youngsters and prospective employers... (Price, 1992, p. 30)

Purpose: To inspire and educate young Canadians to value free enterprise, to understand business and economics and develop entrepreneurial and leadership skills. We do this by developing ...

- the desire in young people to stay in school and appreciate lifelong learning
- positive attitudes toward work and contributing to a diverse society
- business/education partnerships that create a bridge between the classroom and the workplace (Junior Achievement Canada, 2002, http://www.jacan.org/JA_00.HTM)

I began this dissertation with a definition of business-education partnerships from the Conference Board, one that emphasizes the enhancement of student learning. Enhancement of student learning is a complex concept that is an inherent product of the systemic purposes, form/design and structure of education. Both of the quotations that head this chapter express a desire to link or bridge the systems of business and education. The key reason for bridging the two systems is to expand the learning experience for "young people," to include more applicable and current workplace skills. The implication is that the bridge between the world of youth and the world of work requires development as well as support from the systems of education and business.

This chapter is an attempt to bring the study to an end that, paradoxically, is also a beginning. This dissertation aims to provide additional critical factors for business and education to consider as they contemplate partnering together.

Analyzing the perceptions of business and education from a systemic thinking

approach as a means of better understanding business-education partnerships has not been done before now. Part of the problem, if not the problem, in the discussion of business-education partnerships ultimately comes down to an understanding of a society's educational purposes. Fundamentally, what are the purposes of education and how best to achieve them? Is there a dichotomy between workforce preparation and citizenship, as Boyles (1998, p. 5) suggests in his study of corporate attempts to infiltrate schools? What does it mean to speak of educational relevancy? To what is education to be relevant? The majority of educators in this study claimed to be practitioners of relevance while the students countered with the demand for more relevance to the "real world." Business representatives' perceptions of education converged with the students' views by claiming education is not relevant, at least not to contemporary workplace needs. The discord lies between what educators believe they are accomplishing and what business believes it ends up with. This discord needs to be addressed as it obviously makes for a fundamental difficulty for the success of any partnerships and even the dialogue about partnering possibilities.

But should business play a critical part in the education of youth? Most adolescents will enter the workforce at some point following their departure from school, so it seems logical in many respects that business should be involved in their education in some capacity. In this study we saw that business and education representatives present a wide range of perceptions of themselves and of others, as well as of being in partnership together. In the following sections I will summarize those perspectives, with the final section—on business-education partnerships—serving as the place to discuss boundaries and possible bridges to partnering.

Although I treated "workplace" as a separate topic in Chapter Five, the conclusion

from that chapter was that education, like business, is a workplace even for students, though for different motives. Business-education partnerships will both influence and occupy workplaces, perhaps even setting up an alternative or virtual workplace separate from the systems of business and education. In many respects business-education partnerships function in between the workplaces of business and school. Hence, "workplace" is assumed in the following discussion rather than being treated as a separate, related topic.

The aim of this research project, which serves as a platform from which to examine the systemic factors of education and business contemplating a partnership, has been to map the range of perceptions of a sample of people of business in partnership with education, and to demonstrate that these partnerships are complex undertakings. Linear or reductionistic approaches to building or denying partnerships and to understanding them can only prove an ineffective means of wrestling with the complexity inherent in systems, of which business-education partnerships are but one.

Summary of Participants' Perceptions of Business

In my review of the literature I found that business resists a simple, reductionistic definition of its work as merely a matter of profits and market dominance. In essence business consists of any type of enterprise in which goods or services are exchanged between people for a determined value. The marketplace for business is the world and change is embraced as either good for business, enabling product expansions and further refinements, or bad, leading to its eventual demise or alteration. Businesses that are given to inertia or that do not respond quickly enough to consumer demands are likely to fail. Business is subject to turns in the

economy that exert forces on it and that require decisions that will largely determine its effectiveness in the marketplace. Business must deal with governments, competitors, product quality and quantity, customer satisfaction, marketing strategies, investor relations, leadership and labor relations, ethical decisions and build the right employee team. These issues in varying degrees affect all businesses (Lamb, Hair, McDaniel & Faria, 1997).

There can be no doubt about the economic significance of business in societies around the globe. That point became evident in Chapter Two. Where businesses cease to profit, or sometimes cease to exist, the impact is felt with varying degrees of severity throughout communities. People without employment reduce purchasing many things, which in turn cripples the ability of businesses that rely on their purchases to continue. Similarly, as we saw in some of the interviews, businesses suffer, as do the economy and local employment, when the workforce is inadequately prepared or lacks expected requisite skills for employment.

For business, the principal purpose of education is to prepare individuals to be able to function in the world. I realize the difficulty with different interpretations of the notion of "functionality," yet the participants in this study believed that one of the tasks of education was to inculcate general work skills and values. That is, these individuals and companies believed that education better served people by providing students with current basic skills that would enable them to become contributing members of society. This idea of a "contributing member" need not be, as I used to think, a utilitarian or even mechanistic concept that schools would oppose, as if schools had a mandate to maintain what one educator called a "pure education."

This study heard from people in businesses that seek to act as a community member with an interest in assisting in student learning. These businesses see a vital link between education and the strength of the economy and have the common aim of assisting education in achieving its educational goals. This group is in a position to invite educational reform in order to have a ready workforce pool drawn, if not locally, then nationally. This does not mean preparing alienated "widget-makers," as some educators fear. Nowhere did I find in the literature or among the businesses in this study an interest in schools producing pre-established assembly line drones. Neither did I discover businesses among the participants in this study bent on capitalizing on the captive market of students. This is not to suggest that business with profiteering first and foremost in mind do not exist. Far from it! They do exist, have taken advantage of education, and continue to pander a "partnership" mantra while exploiting a largely untapped market (Boyles, 1998; Molnar, 1996; Robertson, 1999, 1998).

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The nature of business, as expressed by the majority of interviewees in this study, is about profits. Profiting from the exchange of goods and services is a debatable good or evil depending on one's stance. The participants in this study, including a number of educators, however, did not speak of profits or business as a bad idea, only that to capitalize on education seemed somehow unacceptable. It was assumed, for example, by many educators and students interviewed in this study that the sole purpose of business was to garner greater market share for their product in order to increase profits. If the means of achieving that purpose includes pushing ethical boundaries, then this is not surprising because this is considered to be the nature of business.

However, it became obvious to me that corporate ends range from profit for profit's sake through to altruistic community assistance. In education we see the range of these ends as corporate territorialism, ⁵⁴ mixed aims of PR and learning enhancement (computer or software vendors, for example), or collaborations in formal education, such as through the experiences of SkyHigh Airlines and Gulliver's Travel in this study. Heeding the observation by Ashwell and Caropreso (1989) that there are differences in culture, whether in business or education, when business knocks on education's door with partnership in mind, business needs to be aware that the partnering process is highly complex. Later in this chapter I discuss a systemic thinking application to business-education partnerships as a means of ensuring the best approach to partnering.

Summary of Participants' Perceptions of Education

Bad performance in business, from money management to workers' attitudes, is remedied through disciplinary measures, retraining or release. Yet, educators, although disciplined for unethical practices, especially towards students, are protected in the system of education by their union contracts concerning their performance. ⁵⁵ Unlike at least the non-unionized business workplace, issues about performance are largely left unchecked (Cuban, 1984; Hodas, 1996).

⁵⁴ Territorialism, or an *imperialistic agenda*, refers to those businesses whose attitude and practice amount to control in the market. This partnership arrangement is typified by exclusive control of a "territory"—a school or the school district, or higher learning institution—in exchange for monetary rewards to the institution. From what I have been able to ascertain, the businesses are typically product suppliers, such as cold beverage suppliers, rather than service providers.

⁵⁵ Some readers will react against my use of the term "union" in reference to teachers associations. First, I have observed that in talks related to educators and their work, that "union" language, "union" outlook and "union" reactions are common. Second, educators become suspiciously guarded when it comes down to discussing performance levels and equitable payment for work completed. And finally, in BC, the Teachers Federation's own literature and website promote a union stance. For example, on

Compounding the problem of performance is the attitude and practice of school boards and governments whose agenda is more in keeping with economics than with adolescents. For example, despite contrary research in education about class sizes and composition, about individual learning styles, about the very architecture of school buildings, decision and policy makers demonstrate through their practices that the people who must inhabit schools for approximately 12 years of their life are a low priority when it comes to funding new buildings, maintaining older ones, determining curricular materials, and deciding class sizes, all of which are based on economics. In short, schooling for the decision and policy makers can too often be about the practice of determining the most number of bodies to occupy the smallest agreeable space for the least amount of money. Adolescents are too often not as great a priority as are budgets (Després, 1993). If economics are the main force behind the decisions about education, then how different is education from business in this respect? Indeed, what of the ethics of the systemic form/design and structure of education?

From this study, the expressed perceptions of systemic factors of education, compounded as they are by the systemic factors of the larger culture, converge and diverge in a number of areas with business. The systemic structure factors, or the timetable, governance and day-to-day workings of school, were spoken of as if a natural part of education and differing from other workplaces. Rhetoric about school

the website the title bar indicates the Federation is a "union of professionals" (http://www.bctf.ca/home.shtml).

change is prevalent among educators but without the attending practice, perhaps because of, or in opposition to, the exertion of government control.⁵⁶

Relevancy

The issue of relevancy is a critical one in any practice. It is what has historically determined the viability and sustainability of any change. The infrastructure of business—and this is growing to be a social infrastructure globally (OECD, 1997; Postman, 1996; Rifkin, 1995)—has included the computer as foundational to most workplace operations. Information technology (IT) has become not only more relevant, but, in North America and growing around the world, it has become a functional part of living and working in the world. For example, the media hype in 1999 about "Y2K" (Year 2000) and computer compliance caused an enormous shaking of the Western world, where fears about everything from planes falling from the air, to power outages and water shortages were blamed on the dependence on IT.

In terms of schooling and the workplace, the practice of relevance is perhaps even more pertinent now to adolescents and business than ever before. Change, literally on a global scale and brought on largely through IT, has affected, and is affecting, the workplace. Are school curricula relevant to the needs of the new generation emerging in an era of IT and spreading global access to, as well as reliance upon, it? Because business is forced to change by virtue of competition and with the aid of production efficiency, business may be the most current source in

⁵⁶ The BC government in 2001 exercised raw power over education by opening contracts and removing or altering parts without due process or mediation. Teachers opted in response to "work to rule," a similar action led earlier by Ontario teachers.

determining the needs of the emerging workforce. It is the link between education and eventually business that necessitates working back from workplace needs to educational purposes and output.

Yet to suggest that education needs to be more "current," as do many writers on the subject of education and reform, ⁵⁷ implies that somehow education is failing in its mandate to educate children. However accurate such sweeping claims may be, a systemic outlook would at least encourage community collaboration in education as perhaps the only means of ensuring that education stays relevant. From the ITM evaluation report mentioned in an earlier chapter I noted:

While a few teachers criticized ITM in terms of the business side of *Knowledge Architecture* ("a lot of glitz") or because of what they felt was [the] company's lack of communication with the teachers, the overwhelming majority of students defended ITM in terms of practical experience, relevance, exciting, challenging, and far superior to, what two other members of Quinn's and Salim's team, Josh and Ricardo, referred to as "boring classes where you sit and have the teacher always tell you what to do." (Després, 1996a, p. 15)

Business respondents unanimously concurred that schooling does not effectively prepare youth for the current workplace. Some of the participants, notably those involved directly with schools in work experience partnerships, even went so far as to criticize parents for not understanding both the dilemma of their unprepared children and their general ignorance of the changing demands of the workplace.

Relevancy is really a question about the three systemic clusters: purposes, form/design and structure. The question of relevancy arises when we look at educational purposes. For what and who does education exist? Questions of

⁵⁷ Recall that in Chapter Two I presented a number of these writers' views about education and its link with the economy. See Alexander (1997), Marshall and Tucker (1992), OECD (1997a & b), for example.

educational relevancy lead to further questions about the form that educational purposes take and also the implementation of these purposes. The implication from the businesses interviewed, which is also the message found in the literature (Carnoy, 1997; Marshall & Tucker, 1992; OECD, 1997), is that an improperly prepared workforce has grievous repercussions, not the least of which are large numbers of low- or under-skilled individuals, forcing businesses to seek skilled, employable people from abroad. Educators meanwhile believed that education was relevant for the most part. Granted educators in this study acknowledged some needed educational changes. Changes in education are legitimated on a micro scale, without disrupting timetables and the *status quo* of education, but systemic change is viewed suspiciously as political or too disturbing (Bacharach & Shedd, 1989; Després, 1999, 1994; Gibbons, 1990).

Business and education will need to consider the purposes of education in relation to the needs of society—including the needs of business—before a partnering agreement is established. If there is more corroborative evidence that would support mutual educational goals, then I think a major hurdle will be crossed. On the other hand, if there is widespread diversity of opinions or outright divergent thinking about the purposes of education, then a partnership in this case will very likely be unsuccessful. In fact, at this point of the partnership exploration for the two cultures they should consider their motives for continuing with the process.

It is examples such as those given above that bring us back to the discussion of the cultures of business and education. A study of the systemic factors would at least raise the discrepancies, allowing for a broader understanding of each system and the workable solutions to anticipated problems. On the one hand, this study has

found that there is confusion about partnerships, from unrealistic expectations to improperly conceived systemic purposes and form. On the other hand, the systemic elements that arise within partnerships and that adversely affect the partnership's potential for success are problematic. But acknowledging these problem areas does little to resolve the business-education partnership dilemma. The difficulty is that education is a function of a larger system, social and national, and business operates for a different set of purposes. Although the two systems are related, as I said before, historically and socially, it is a superficial reaction of education to resist outsiders. That is not to suggest that pursuing business-education partnerships should thus continue. It does suggest, however, that education and business would benefit immensely from a combined and concerted effort to think systemically about the future of education in the context of a nation's economy and cutbacks on education funding as just two critical areas.

Ashwell and Caropreso (1989) discuss concerns about educational assessment. Regarding future employment for high school leavers, is what is being learned in schools applicable to the world of work? What has been mastered? What level of achievement has been obtained? Assessment or measurements may be a relatively simple task concerning business products, but it is far more complex when dealing with persons in the school setting. For example, there are a number of systemic factors that interfere with clear-line assessments in school, variables such as socialization at home and with peers, cultural and media influences, educational funding, community values, and the characteristics of each individual all of which compound the complexity of education. This is where business would benefit from greater understanding of the system of education.

Educators' perceptions of educational relevancy varied from wholesale acceptance of education as it currently is to large-scale changes. The problem of relevancy, from this study, is that it is too broad an undertaking. Although these educators reluctantly agreed that change was necessary in parts of education, no clear idea of how to achieve those changes emerged. Likewise the business and student participants could only pinpoint issues, such as teachers being current or preparation for the real world, but how these issues could be rectified or how the collection of problems in education are related and perhaps demand a systemic examination toward a solution. Business-education partnerships are not a panacea by any means for ensuring relevancy. With no clear or carefully delineated purposes for partnering, it is little wonder these partnerships are in the third wave. Relevancy, like any of a number of the systemic elements mentioned by participants, is but one complex problem and not a binding reason for initiating a partnership. However, from the views expressed by most of the participants, it is plausible that relevancy could be an outcome of partnering, but only where it is deliberately addressed in the partnership's systemic factors, particularly purposes and form/design.

As a response to the question of educational relevancy, policy makers and practitioners need to question the pertinence of a curriculum. What is the curriculum's connection to students' and society's needs? On a broader social plain, is the curriculum appropriate? That is, does it suit the needs of the greater socioeconomic culture? The world outside education is evolving faster than the schools. The social landscape has changed; many business practices are changing, and technology is (arguably) rendering the world a smaller place. These points were evident to the participants. Business is questioning the practical and functional

relevance of much of education, especially—but not only—regarding the preparation of students for the workforce. This concern for workforce preparation and relevance brings with it further questions of the purposes of education.

Summary of Participants' Perceptions of Partnerships

What is evident from this study is the diversity of viewpoints about business, education and their partnerships. The data points to a far more complicated matter than simply totaling the number of convergent versus divergent points among the participants, as though this number might provide a basis for the continuance or deference of business and education partnering together. More importantly, we can reflect on the data I have gathered, particularly key points of convergence and divergence, in an effort to bridge our grasp of the complex nature of partnerships between the two systems.

The greatest degree of convergence of perceptions between business and education participants took place around workplace characteristics, partnerships and educational purposes. These seem promising points for further exploring the value of in business-education partnerships with potential participants. The business representatives tended to accept the idea that schools possess some of the characteristics of the workplace (with the exception of independence. See Appendix 4). While there was nothing approaching a consensus among the participants, the majority in this small sample saw eye-to-eye on this point, just as they did with business-education partnerships. What this suggests is that topics such as the workplace or the nature of partnerships might offer potential participants a common point of fruitful dialogue, the results of which would themselves be educational for both parties. Judqing by my sample, the likelihood of educators and business people

finding points of agreement across this divide, even as there remains disagreement among the educators or the business people would in itself be informative.

Likewise, the topic of educational purpose provided a point of agreement across the business-education divide, as well as much divided opinion. For example, participants in this study saw some of the key purposes of education in terms of personal development, to provide knowledge and life skills, to develop competencies and problem-solving skills, and preparation for the workforce. Not all these factors were acknowledged by all of the participants, but the point here is to identify the basis of dialogue with the potential relative agreement on the basic values, while the disagreements over the detail could become important elements in evolving partnership deliberations.

Given the close points of convergence, it seems fair to say that the divergence of perceptions among participants was strongest around educational relevance and change. These factors fall across the systemic categories of purposes, form/design and structure. Yet, even here, business representatives and students were in a loose form of agreement that education, contrary to business, was behind the times. Relevance in education reflected a bygone era and a system rife with irrelevant teaching practices or experience in the real world. Even some educators agreed with this concept of educational irrelevance, even if less inclined to suggest that a greater orientation toward business might be a source of relevance.

Educational change is tied in with relevance, as well as with educational purposes. These two points of divergence seem to give the most difficulty in partnerships. First of all, in order to determine relevancy in education, stakeholders will have to come to some agreement on the purposes of education followed by the

steps for achieving them, or the change process. The articulation of those educational purposes and the corresponding issue of relevancy become complicated by radical differences in participants' perceptions of what matters most in education. Yet a belief that these differences of perception cannot only be bridged, but can be bridged in educationally fruitful ways, is critical to the partnership question. What I have learned from the literature is that the complexity of partnerships, no less than education itself, makes it impossible to effect necessary changes, except on a small, local and difficult to sustain scale. That does not mean such efforts are futile but that they must be modest in their ambition.

There was serious disagreement over whether businesses and educators, along with education stakeholders, can have significant positive impacts on one another and, most importantly, on the learning of students who, one way or another, are preparing for life after school. Again I would call for further dialogue, dialogue enlivened by the desire to learn and to demonstrate a dynamic and vital education. The lesson we can draw from these points is that although the literature only provides us with a perplexing array of findings and opinions about educational and partnership purposes, the participants in this group have provided indications, largely unbeknownst to themselves, that possibilities do exist of building bridges in a dialogical quest for an exciting and dynamic system of education.

Without a realization of this dialogic potential all that remains to the business-education partnership are concerns with making monetary or product donations.

And so education becomes concerned, in turn, with formulating a "donations policy," for example, which Don (B) discovered and bemoaned. This leaves in place a business-education partnership protocol that each culture expects, although it is

most likely unarticulated. And educators harbor suspicions about the nature and the purposes of the decisions to partner with business along with the partnership itself. At the root of much of the differences between business and education are the differing views of the purposes of education. Business views the world through economic lenses. Perhaps surprisingly, so do education decision-makers.

This study is hardly the first that has run into at least two major problem sets that beset the schools. First, education suffers from divergent perceptions of its systemic purposes and form in society. Second, education suffers from stasis (Contenta, 1993; Cuban, 1984; Marshall & Tucker, 1992). There are other problems, of course, but I believe they are elements of these two major problem sets, hence my choice of "problem sets."

In the first problem set education appears to be disrupted by external forces, such as political, business or social rather than guided by a long-term, unified vision. Within a democracy, there are bound to be differing and competing ideas of what constitutes a good education, just as there are about what constitutes a good democracy, but there also needs to be some shared values in both cases, around which much productive disagreement and deliberation can take place. It is not always clear to the participants in this study whether they share the same basic values for education, and this creates a mistrustful atmosphere in which to foster partnerships.

How could systemic thinking aid us in rectifying this problem set? There is a series of questions that need answers, questions about the purposes of education in an information society, or education stakeholders' perceptions of the purposes of education, or the reasons for the purposes as they exist and how these purposes are

being achieved. By and large, the participants offered diverse "visions" of how education ought to be, without realizing the convergence in values shared within those visions. Business-education partnerships do not compound these problems as much as they miss out on the opportunity to deal with the systemic factors that are critical to realizing a broader educational purpose.

The related second problem set in education has to do with just how hard it is to change schools (Contenta, 1993; Cuban, 1984). Education is a practice of resisting change whether purposeful or by resignation, rather than being vital, current and dynamic. As with the first problem set, how could we apply systemic thinking to remedy this problem set?

Education partnerships can be a means to such relevant ends as greater engagement in the community, the learning of business practices, and even more autonomy and responsibility in student-directed learning. But that is not to acquiesce to the extreme vision of schools *qua* industry-worker-prep-schools, an overstated accusation made in the more pessimistic writings about such partnerships. For example, Robertson (1999), in an *exposé* of business' interest in free market education, claims:

But the fundamental problem with partnerships is not that many of them are smarmy. The long-term problem is that public schools are becoming dependent on the private sector and its abiding approval. "Partnered" schools soon admit that they couldn't survive without the largesse of their corporate benefactors; predictably, the terms of the deals are ratcheted up as dependency increases. Corporations get what they want at both ends. The same players that have successfully led the lobby to reduce public spending get to selectively rescue the victims of the cuts and bask in their subsequent gratitude. (http://www.pdkintl.org/kappan/krob9906.htm)

What is most threatening to the system of education is not the perceived imperialistic overtures of some corporations, but education's own apparent intransigence in the

face of a changing world. As an example, Cuban (1984), in his research on educational change since 1890, found that teachers tend to continue their age-worn practices: "[The] occupational ethos of teaching...breeds conservatism and resistance to change in institutional practice. This conservatism, i.e., preference for stability and caution toward change, is rooted in the people recruited into the profession, how they are informally socialized, and the school culture of which teaching itself is a primary ingredient" (p. 243).

Increasingly as the world moves from an industry-based society into an industrial society emphasizing information and the technology of manipulating it, education will likely continue to hear calls for reform. Enter business-education partnerships. Are they a vehicle of positive educational change? Businesses are willing but educators are hesitant. What are the real benefits to students and education? Business-education partnerships possibly allow the insurance that students learn about variations in workplaces and that workplace is more than a mercenary arrangement between employer and employee, which is the typical understanding from the participants. Are there alternatives? Is the government negligent in its mandate if it opens the way for the development of educational enterprise? Who should decide? These are just a few questions we must pose in order to ensure that partnership arrangements advance properly, if at all. In the Appendix (see Appendix 5), I have developed sets of questions for partners and stakeholders as a means of ensuring that as much detail as possible is revealed about motives, educational purposes and form, responsibilities and procedures in order to make the best decision about business-education partnerships.

Business provides goods and services for which it commands a return of some determined value that includes profit. Education functions for the purpose of providing adolescents with information and some assumed basic skills, such as reading, computation, writing, thinking, all with a view to preparation for participating (responsibly) in society. Speaking of a general outcome of education in their discussion of the sociology of education, deMarrais and LeCompte (1995) state: "Schools prepare students for the work force in part by teaching attitudes, technical skills, and social behavior appropriate to the work place, such as cooperation, conformity to authority, punctuality, gender-appropriate attitudes, neatness, task orientation, care of property, and allegiance to the team" (p. 10; italics added). Although seemingly utilitarian, it is the "bottom line" of why schools exist and operate in the way they do. And at the same time, educators also command financial return for their services. While business operates on the premise of service⁵⁸ for profit, education operates on the premise of service for preparation. In both cases, however, businesses providing the services they do and educators providing the services they do expect and receive recompense. This, on the surface, is a shared similarity between the two cultures, which can also serve to start bridging the two systems. Thus, the charts that I incorporated in the appendices are meant to help the reader quickly note possible convergent and divergent points between the two cultures.

⁵⁸ Whether business provides "goods" in which service and products are subsumed, or "service" in which products or goods and various services are subsumed may be helpful for many who want to delineate the function of business along such lines. I tend to lean more toward the argument that business provides a service to customers by making available goods and personal contacts that enable people to achieve their desires.

Towards A Systemic Thinking Approach to Business-Education Partnerships

As has been discussed in this dissertation, the subject of business-education partnerships is contentious for a number of reasons. A primary rationale for business and education partnering together arises from needs. Business needs skilled workers in order to compete and survive. Graduates "need" the proper skills and skill sets that enable them to compete for jobs in a global market. Education needs more funding in order both to maintain its *status quo* and to attempt to be current. These needs are fairly obvious. But what is the best means of ensuring that all factors have been weighed for education needs?

Given the range of perceptions of business-education partnerships examined in this dissertation, we can conclude that partnering is not a simple matter of two parties agreeing to work together to some mutual benefit. Business-education partnerships are complex arrangements because the systems of business and education are comprised of complex factors that influence both the set up and interpretations of the arrangements and their degree of success. It is not enough for critics of business-education partnerships to point to some of the systemic elements, such as motives and practices, as problematic and therefore reason to avoid partnerships. Molnar (1996), for example, makes a valid point about the potential problems of partnering. He claims: "The chances of heading off this brave new world of commercial education are slim without a much greater public awareness of everything that is at stake for our schools, our culture, our economy, and our children if we allow private profit to become the motive force behind public education" (p. 20). If "private profit" were all that there is behind business-education

partnerships, then we could agree and choose to rally support around him. But as the business participants in this study made clearer, profit is not the sole premise of partnerships. Excluding business *ipso facto* from the education of youth as part of their preparation for meaningful inclusion in society is too limiting a view. Molnar is absolutely correct, though, when he demands a "much greater public awareness of everything that is at stake...." Apart from a systemic thinking approach, to which this dissertation points the way, business-education partnerships will continue to be problematic for both partners and the community.

Business-Education Partnership Boundaries

Who should draw the boundaries in business-education partnerships? As I have attempted to show in this dissertation, business and interest groups have delineated partnership parameters. There are some arrangements that seem to stretch the boundaries between learning and profiteering. Some schools are content to have an exclusive contract with a cold beverage supplier, for example, in return for funding, which could be used for a variety of educational purposes. One could even arque that these purposes enhance student learning.

Where a partnership is a conditional arrangement between a corporation and a school in which the school would receive goods in exchange for some predetermined obligatory outcome, such as increased grades or exclusive rights for the corporation, the relationship is a weak one, for at least three reasons. First, such an arrangement forfeits equality between the two parties. The condition-maker becomes the power-wielder, which is for all intents and purposes a predatory approach. It matters little that the participant receivers agree, for whatever reasons, to the terms and conditions. Just as in any cultural milieu, an imperialistic agenda

violates any notion of partnership or sharing of values and objectives (Conference Board of Canada, 1997). In this case, Robertson (1999, 1998) is quite accurate in her depiction of a "controlling-controlled" relationship. ⁵⁹ The second reason why the relationship would be a weak one is that it fosters relational instability. As the recipients strive to meet the expectations (real or perceived) of the provider, tension builds, driving the purpose away from learning and toward meeting the controller's demands. Finally, such control agendas strain the relationship potential by placing the school under obligations that are controlled by outsiders. In this case business decides the conditions, the statute of limitation, and the degree of quality. Education effectively prostitutes itself (see the first point). This involves a serious problem with accountability, given that the students are not typically part of the negotiations.

Ethical considerations in education are another systemic element that affects the over all partnership. Although none of the participants in this study raised any questions about, or even mentioned, ethical concerns in education (they were more concerned with business' ethical conduct), it is still a serious issue. Perhaps it should be in its own systemic category: systemic factors of ethics, giving us systemic purposes, form/design, structure and ethics. Certainly in business-education partnerships "ethics" is raised, from the ethics of business' motives to its practices in partnerships. It is a matter ethically, however, that a group in society—i.e., students—tends to be excluded from engaging in a fundamental part of their life, that they are not the key elements in the decision-making process regarding school architecture or

⁵⁹ The similarities here between addiction behavior and the acts of "controlling-controlled" business relationships are worth noting. I raise the matter here to draw attention to the complexity of partnerships, that there is "more than meets the eye," a co-dependent relationship is not a healthy one (Schaef, 1987).

curriculum delivery. ⁶⁰ Ethical considerations in education, however, are left unspoken, and I believe the silence on the topic is because educators and education stakeholders give little thought to the systemic factors, or full range, of education.

Education itself is a peculiarly paradoxical event. The aims of Western public education do not include a heritage of rites of passage for the transition from adolescence to adulthood. Unlike some cultures in other civilizations where the young are "schooled" by elders to a point in time when they must succeed in a rite of passage to adulthood (Gibbons, 1990), Western cultures arguably lack a celebrated transition point or period between adolescence and adulthood, between school and workplace. Whether educators could play a critical role in the discussion of businesseducation partnerships is a moot point. As we saw in the example of Bellevue School District's cold beverage supplier partnership, educators were canvassed almost as an afterthought to the teacherless committee's decision process. Although there are bound to be exceptions, education administrative *fiat* continues to reign, effectively keeping teachers as voiceless, blue-collar workers (D. Hargreaves, 1995; Marshall & Tucker, 1992).

Ultimately, though, the boundaries to business-education partnerships are "fuzzy." We have seen the concerns about business-education partnerships raised by some researchers and critics. For the most part the fear surrounding these partnerships stems from the perception of business as an exploitive group bent on

⁶⁰ The question of student involvement in decision-making raises a number of questions. As it stands, students tend to share a similar role as quasi-slaves. Rights are granted by decree or legislation. For governing agents to speak of the needs of students is a curious matter as has already been raised in Chapter One. The issue of others speaking on behalf of others is an age-old dilemma as much as it is an ongoing debate in research agendas (see Freire, 1974; Popkewitz, 1995; Sergiovanni, 1987).

commercialism and strengthening its bottom line. The same fear draws in students, who are a captive group because of the systemic structure of education. Rather than train students and the surrounding community about the nature of materialism and commercialism (and the drive of our own desires), such as intimated by Otto (E) and Bob (B), the response to business tends to be to barricade schools to their entry. Only those businesses with special permission may pass. The barricade is not consistently applied in education while the decision to erect one or not comes about more from a reactionary stance rather than the result of systemically thinking about education and its partnerships.

Building Business-Education Partnership Bridges: Initial Stages

The systems of education and business share similar historical foundations, hierarchical management practices and systemic structures (Eurich, 1985; Marshall & Tucker, 1992). But they are apparently distinct in numerous systemic factors and elements, such as mandates, nature and parlance. I say *apparently* because upon closer examination the perceptions of difference give way to similarities. Both business and education have vital roles in the establishment of an educational direction that incorporates learning from a broader perspective. This is where business-education partnerships have the potential to significantly contribute to education as a whole.

What are some possible links between business and education that could help foster the spirit and practice of partnering? There are some institutions that are active in building bridges between the two systems while raising levels of concern over

possible issues. 61 In terms of bridging the two systems while quarding individual boundaries, the first question regarding business-education partnerships is a question about motives. Why would any school desire to enter into partnership with a particular business, and vice versa? The answers to this question are as diverse as the participants, and to ensure that educators and business resist second-quessing the motives of the other, the potential participants need to have a better understanding of how and what systemic factors are shaping their perceptions of the partnership and the partners. It is not a question of one culture assimilating the other like a kind of corporate merger. This is not to say that business-education partnership caveats should not be heeded. From the interviews for my study I was able to determine that business also proceeds with some caution in considering partnership arrangements with education, and not simply for the strategic market advantages that most critics of business-education partnerships seem to imply is at the root of businesses concerns, but out of a sense of conviction as community members conscious of education's greater needs.

Bridges between business and education for the purpose of partnering are, it seems, likely to occur in any event.⁶² As long as education continues to seek more funding for its programs, or existence, the more likely it seems it will begin to court businesses as the means of achieving its financial goals. At this point the possibility of a partnership specialist, who could delve into the systemic factors of business-

⁶¹ See for example: http://www.warwick.ac.uk/fac/cross fac/cei; or Junior Achievers: http://www.jacan.org/JA OO.HTM

⁶² As I was ending the writing of this dissertation I read of school districts in BC that were aggressively advertising their "services" in Asia. An opportunity for teachers to commodify their expertise instead turned into a lament railed at the districts for becoming entrepreneurs.

education partnerships to the satisfaction of both parties, seems the best bridge.

Policy-makers would be assets in the discussion also as alternative voices and raising additional considerations.

In the first chapter I introduced systemic thinking as a means of making sense of the data and as a possible approach to dealing with the complexity of business-education partnerships. The following questions provide a beginning point for thinking systemically about business-education partnerships, either prior to their inception or during their implementation. As is the case with thinking systemically, questions overlap in areas (specific questions to aid potential partners in a discussion around partnering are listed in Appendix 5).

- What are business' expectations for education, particularly as economic factors cause more shifts in the traditional work environment (see M. R. Bloom, 1995;
 Eraut, 1991; Marshall & Tucker, 1992; Rifkin, 1995)?
- 2. To what degree and in what ways are the purposes for business-education partnerships
 - a. the enhancement of learning?
 - b. to serve a goal of training students for eventual work?
 - c. for profit?
 - d. for public relations?
- 3. What is the impetus that leads business to support educational reform through partnerships (see M. R. Bloom, 1995, 1997; Contenta, 1993; Marshall & Tucker, 1992; Molnar, 1996; Robertson, 1998)? What are the perceptions of educators regarding this support?

- 4. What systemic similarities could help to bridge the systems of business and education?
- 5. What are the systemic factors that could aid a broader more unified community approach to education?
- 6. What systemic factors thwart a unified community approach to educational relevance?

Research Limit(ation)s

This study is based on the perceptions of business, education and businesseducation partnerships presented by a small sample of business people, educators and students. It is not my claim that these perceptions are generalizeable to a larger population. Rather the perceptions of this group present what I would argue are effective examples of how there can be points of divergence and convergence among the participants in business-education partnerships, and how the fundamental and significant nature of those points can provide the basis of a breakdown or the development of such partnerships. The particular points of divergence and convergence found in this study do not predict the points that might be found in any other group that comes together to partner. But these points do serve, I argue, as excellent examples of both what such points look like, in a way that is easily recognizable for such participants, and why it is so important to address the possible points of divergence and convergence. This study is meant to make its contribution in just this way, both for the study of these partnerships in the future, and in the development or avoidance of such partnerships by the potential participants in them.

What remains to be tested, then, coming out of this thesis, is whether groups that come together to consider forming such a partnership find the experience of explicit examining the points of their own divergence and convergence in understanding business, education and the possibilities of their partnering helpful in arriving at a decision on whether to proceed with a partnership and, if so, in giving shape to a fruitful and productive partnership. I look forward to undertaking such a study in the future.

Conclusions

If we accept Cuban's (1984; see also Gibbons, 1990, 1976; Lowe, 1997) observation that education has not really changed in well over a century in many respects, then one has to wonder about the usefulness and purpose of education. According to some of the comments in this dissertation education performs a highly useful social function: a complex baby-sitting service, a "game-farm," an acculturation agency, a skills provider. Although organizations, such as provincial teachers associations, are able to draft regulatory principles to guide partnerships, how are these to benefit practically the structure of partnership arrangements? How do they truly speak to the enhancement of learning? The regulatory principles are certainly protectionistic towards the students, but at what cost? How, for example, do they ensure that students are not duped into thinking that brand X is better than brand Q? Are the policy-makers acting in the true best interests of students and learning or is it a more elusive and altruistic cause? In other words, is there an element of anticorporate sentiment that colors the making of these policies? After all, schools are living examples of "walking billboards" of some design or fashion statement, from principal to student. School boards or principals sign exclusive deals with

corporations without explicit input from either teachers or students. What are the ethics of these examples? If education operates within a closed system and can only attend to what fits within the structure and systemic trappings of its system, then business—and no less government and society—needs to examine education quite differently. This is not to say that I think business and society must compromise to the point of being subsumed by the habits of education any more than I would expect education to abandon its mandate in order to incorporate a predominantly business ethos of success.

The full range of potential benefits that might derive from business and education partnering has yet to be attained. Participants in this study admitted to positive outcomes of partnering but, as I have mentioned, were unable to explain how the two systems might best work together. Educators belong to an "excluded" group by design and by their own in/action: They are neither included as part of the serious discussion on partnerships nor are they given to a collaborative front that speaks to educational problems with systemic understanding. The greater possible benefits of partnering are unknown because they have yet to be fully exploited or explored. Certainly, the warnings that various writers and researchers have voiced are warranted in many cases, but these are concerning a small portion of the business world. This is why it is imperative to conduct further studies on business-education partnerships so that we could have the most complete understanding possible given the complex nature of the systems of business and education and of their partnerships.

What I have been able to bring into the light from this study is the diversity of perceptions of the participants, which clearly indicate that there is no single problem

that could be easily remedied by this or that infusion of capital or expertise. Despite written educational purposes and general purposes for partnerships, evidently how people interpret them, or perceive them, leads to multiple versions of what those purposes are and how they ought to be attained. Confusion may arise as a result, but the main problem is the ignorance of the complexity partnerships afford and the corresponding non-systemic thinking approach to ensuring the best possible solutions, which includes how best to achieve enhanced and relevant student learning.

Business needs to recognize that although education may be in great need of funding, there are a number of systemic factors demanding clearer understanding. Companies that ignore the ethical elements and the concerns of educators or students, for instance, run the risk of a backlash from the very groups they are targeting (Alexander, 1997, p. 81). Then again, they may risk nothing. Given that societies change, their demands and needs also change. It is entirely possible, and plausible, that education may so change as to become umbilically linked with corporations. However, given business' competitive nature and education's more didactic practice, how do we ensure that the system of education is not compromised by business' bottom line? What is needed, then, is a creative and educated response that is both prepared and able to guide the transition from the present state of education to a future direction serving the greatest learning benefits for students and needs of society.

Some issues remain largely unresolved here, such as the effectiveness of having participants address more directly the systemic questions underlying business-education partnerships. A practical ethical question in business-education

partnerships becomes why not? Why not partner if public funding is dwindling and taxpayers decide (by apathy or choice) that partnerships are acceptable so long as their child is not harmed? Is education placed at risk in partnering with business? What effect do the resources business brings have on learning and on the best kind of preparation for students in their transition to the "real world"? If the factors of economics and community interrelation are to be taken seriously, then businesseducation partnerships make reasonable sense, but not at any cost. Ethical issues, such as education for profit or the practice of schooling, are long overdue critical examination by educators and community. How is any education partnership to achieve long-lasting success—success being enhanced student learning and reciprocal benefits to the business—without a drastic reinvention or compromise of education, if possible? And is it possible to carry on with a bit more light-heartedness as the problems associated with business-education partnerships are broached? Certainly they are not life-threatening issues. There are more questions and considerations in need of researching. It is the consideration of these types of systemic questions that could have a positive impact on the system of education, including teacher education (Riley, 1996), and the potential good of education partnerships. The economics and time of applying systemic thinking to assist training educators to become facilitators of change and to become proactive in bridging education with social institutions—including business—requires a mammoth effort by all education stakeholders. This dissertation is the first step in that effort.

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Questionnaire and Interview Schedule

Please answer the questions below. I am interested in as much detail as you are willing to give.

The purpose of this study is to develop greater understanding about the relationships between education and business through joint partnership arrangements, what makes an effective partnership, and especially apprehensions experienced by either party. I am a doctoral candidate at the University of British Columbia with 18 years of public school and undergraduate teaching experience, and founder/director of da Vinci Consulting—an education-business consulting company. Please read the Participant Consent Form before you begin.

First name:

ls your age between 15-19, 20-26, 27-34, 35-40, 41-49, 50-65, 66+?

Occupation(s) and number of years;

Education;

Active interests;

- 1. Level of technological proficiency (e.g., basic computer use, surf Web, hacker);
 - 1.1. This set of questions deals with information technology and the workplace:
 - 1.2. What is your understanding of workplace?
 - 1.3. Are schools to be included as workplace?
 - 1.3.1. What is/are the difference(s)?
 - 1.4. Do schools need to change to prepare students for the workplace?
 - 1.4.1. If so, how should they be changed?
 - 1.5. What do you think are the social skills one needs for the workplace?
 - 1.6. Do you use electronic mail?
 - 1.7. In terms of Information Technology Management (refer to program), how does this approach relate to work?
 - 1.7.1. How is this approach different from the rest of schooling?
- 2. This set of questions deals with business-education partnerships:
 - 2.1. Have you worked in a collaborative relationship with business/education, or do you know of such collaborations? Describe the collaborations.
 - 2.2. What have been the best points of collaboration between business (or community) and schooling?
 - 2.2.1. What have been the negative experiences between business and schooling?
 - 2.2.2. Why do you think that is?
 - 2.3. In what ways, if any, should the business community be involved in public education beyond assisting with resources (i.e., equipment or funding for school activities; goods/services)?
 - 2.4. When or where do the lines or boundaries need to be drawn?
 - 2.4.1. Who should draw them?

- 3. This set of questions deals with understandings of the cultures of education and business:
 - 3.1. What is the nature of business/education in your understanding? In other words, what are your perceptions about business? education?
 - 3.1.1. How do you substantiate your understanding/perceptions?
 - 3.2. What metaphor would you use to describe education? and business?
 - 3.3. What is your response to the suggestion that teachers are in the "business" of schooling and resist external commentaries, direction or expertise especially from business?
 - 3.3.1. If you are in agreement, why do you think this is? If not, please provide further clarification.
 - 3.4. Is there consistency, or alignment, between school and the business culture, or is there a tension?
 - 3.4.1. Where does the consistency or the tension lie?
 - 3.5. (Refer to grid on Characteristics of Workplace) Are these characteristics consistent for all businesses?
 - 3.5.1. How does each culture understand these characteristics? Is the language the same?

General Chart of Types of Education Partnerships

Levels of Business-Education or Education-Education Partnerships Matrix 1*

Partnership	MATERIAL RESOURCES	HUMAN SUPPORT Pricessing Level of mutual linvolvement	CURRICULUM COLLABORATION
Brief description	Material or financial resources	Human resources that serve	Partners work together on a
	(often beneficent) provided to	to support a curriculum	curriculum or component of a
	support a curriculum	component	curriculum
Aims	To provide material and/or	To provide real-time human	To co-develop a curricular
	financial support for a	liaison from an enterprise or	initiative to be used in a public
	curricular initiative.	institution in support of a	school setting.
	To supplement a curricular	curricular initiative.	
	initiative.		
Examples (taken from	 ITM curriculum and 	 ITM resource 	 ITM curriculum and
research notes and	resource guide;	person/facilitator;	resource guide;
research findings)	 Larson-Simpson 	 Classroom visits by 	 Utility companies
	Technologies donates	business (SkyHigh Airlines,	materials (Harty, 1979);
	computers/printers to school	Gulliver's Travel) or teacher	 Channel One;
	Ü;	visit to business;	 Gulliver's Travel agent,
	 SkyHigh Airlines provides 	 SkyHigh Airlines 	Angela, collaborates with
	avionics equipment to school	involvement in Career and	teacher, Debbie, to teach
	·	Personal Planning (CAPP);	students about hospitality
	 Channel One provides 	 Larson-Simpson 	industry;
	electronic equipment	Technologies gives follow-up	 SkyHigh Airlines

	(Molnar, 1996; • Apple and IBM provide	workshop to students and teachers on use of donated	collaborates with Derrick (teacher) on avionics course;
	discounted equipment;	equipment;	 Partnership schools (UBC-
	 Bell sets up ISDN lines in 	 On site mentors for pre- 	Richmond Project: Després,
	California;	service teachers;	1996b);
	Mason Good supplies	Mason Good gives	Mason Good collaborates
	materials for brochures (for	training and support in	with Richmond school to
	savings Bonds	procnure creation	develop and disseminate
	announcements) as well as		brochure for savings Bonds
	office space and hardware;		
2	 Government agency 		
	donates outdated office PC		
	due to upgrading;		
(Control of the Control of the Contr	 Utility companies 		
	materials (Harty, 1979)		
Benefits to School	 Supports education; 	 Supports, supplements or 	 Teachers gain first-hand
	 Supports specific program; 	improves upon curricula via	experience in business
	 Teachers/students have 	specialized input/expertise	setting;
9	access to televised programs;	(e.g., science, ITM,	 Mutual professional
er er	 Access to the world wide 	community visitor);	development;
	web and internet services;	 Supports or supplements 	 Supports curriculum
	 Access to additional 	teacher work and provides	directly;
	resources;	students with practical skills;	 Curricula developed
	Support of	 Real-world, "just-in-time" 	concurrent to actual needs;
	curriculum/learning;	learning sources	 Close look at the culture
Total Control of the	Improved curricular		of business;
	components		Interaction with
			community as co-partners in
			educating
Disadvantages to	Obligation;	 Limited control over 	 External control of
School	 Limited or no choice of 	presentation;	development/content;
	materials;	 Possibly uncertified 	 Opens door to possible

	 Demands for state of the 	persons;	future exploitation;
	art hardware/software;	 Limited contact; 	 Inadvertent advertising;
	 Dependent on economic 	 Negative advertising 	 Time on task contrary to
	conditions;	(Harty, 1979; Molnar, 1996;	timetable;
	 PR for business; 	Robertson, 1998);	Cultural upset;
	• Used;	• Used;	 Status quo challenged;
	• 1-sided;	1-sided	 Union difficulties
	 Possible outdated 		
	materials;		
	 Possible "strings attached" 		
Benefits to (business)	 Ready group and captive 	 PR (demonstrates 	 Business gains insights
Partner	audience	responsible community	about education needs and
	(students/educators);	involvement);	expertise;
i de la companya de l	 Potential future 	 Preparation of individuals 	R&D input;
d Section of the section of the sect	customers;	for the workforce;	Connection to
	 PR (demonstrates 	Community	community;
	responsible community	input/responses;	 Control cost versus profit
	involvement);	 Opportunity for "just-in- 	potential;
	 Receptive clients; 	time learning and "real-	 Mutual Pro-D;
	 Filling a need; 	world" experience	 Stake in future;
	 Tax benefits 		 Input in schooling
Disadvantages to	 Find receiver; 	 Negative PR; 	 Cost potential and low
(business) Partner	 Transport goods/transfer 	 Cost absorbed by business 	profit potential;
	\$\$;	(cost versus profit potential);	Time factor: school
	 Negative PR; 	• Used;	timetable;
	 Cost absorbed by 	• 1-sided;	 Lack of flexibility of
	business;	 Time away from business 	educators;
	Cost versus profit	has impact on sales/profits;	 Time away from business
	potential;	 Limited input 	has impact on sales;
	 Possible rejection, 		 Dealing with a non-
	misunderstanding of		business culture and its
	components—no control;		suspicions/antipathy toward

	• Used; • 1-sided		business
Ethical Issues	 Who receives resources and why them; 	 Certification (non-teacher in class); 	 Amount of input by teachers and amount of
	How much is provided/given:	 Partner intentions I evel of actual learning 	control by partner, or
	 Partner intentions; 	enhancement;	Who decides what? How?
	 The child? 	 Soft advertising; 	To what end?
	 Students as captive 	 Acceptable: vendor- 	 CAPP = work done by
	audience;	customer (as per contractual	non-union persons
ini K	 Mere mercenary reasons; 	obligations for goods	(adolescents);
	 Acceptable: vendor- 	received)	 Partner intentions;
	customer		 Direct advertising versus
	 Freedom of 		learning benefits and costs
317	expression/dissent		 Advertising to a captive
			audience (students);
			 Ownership of the
			curricular
			materials/components
Political Matters	 Who receives them and 	 Who performs what; 	 Purpose/content;
	why;	 Role of government; 	 Who controls outcomes;
	 How much; 	 Program purpose; 	 Role of government
	 Bottom line for business 	Content	 Individual roles;
	and education;		 Implementation details
	 Role of government 		(resources, time, training, in-
	1		service, relation to other
			subject disciplines)

on AL.

^{*} Partnerships are formal or informal arrangements whose function is the enhancement of learning. Business or higher learning institutions tend to be the initiators of partnership arrangements.

Workplace Characteristics

The eleven workplace characteristics that were presented to the interviewees for their comments are presented here with the purpose of providing a more functional understanding of the terms used (see chart further below). Interviewees tended to combine *Project Planning* and *Project Management*, making no distinction between them. The reason offered was that the two concepts were mutually inclusive. That seems to be the case online, too. In one professional site devoted to project management, http://www.allpm.com/static.html, planning is a subset of project management.

Service is a term often used in business but less so in education, although there is no denying that schooling does provide a service to students as well as to parents. The service to parents runs from the crass "baby-sitting" or "to keep kids off the street" to in loco parentis educating, so that parents do not have to do the educating.

Creativity is that source of design and research that enables enhancements to products and services.

Both cultures engage in some form of *assessment*, or *evaluation*, whether of student performance in subject matters or industrial products and workers.

Technology is found in the cultures of education and business in more ways than computers and devices. Pai and Adler (1997), speaking about the influences of industrial production in education, indicate that, "the ways in which this process of industrial production is applied to education and schooling vary, [but] the basic principles remain the same. An emphasis on competency-based instruction, quality

control, minimum competency testing, accountability, and cost efficiency reflect the influence of the technological perspective in education" (p. 149). The term here is drawn from business, highlighting the influences that business still can have in education. Hodas (1996), in his analysis of technological resistance in education, speaks of the school as a technology itself, broadening the definition to include any means of acquiring knowledge.

Independence is determined by the ability of the individual to undertake tasks on his or her own and includes such concepts as self-reliance, and accepting responsibility for one's own actions. Pai and Adler (1997) describe independence as "acting self-sufficiently, and handling tasks with which under different circumstances, one can rightfully expect the help of others '... Various occupations and institutions in the larger society require their members to self-initiate activities to accomplish their assigned tasks and to accept personal responsibility for their own actions. Clearly, schools are much more systematic than families in providing conditions for the development of independent attitudes in the young" (cited p. 144). Schooling, on the one hand, assumes independence of learning in the form of homework and most learning activities. On the other hand, the nature of education has students grouped in masses instructed/managed by a teacher. Independence is a more conducive term to describe the nature of teaching (D. Hargreaves, 1995). ITM combined both features of independence and teamwork with greater affinity for the culture of business in its emphasis on different segments of project work.

Collaboration is the deliberate uniting of individuals with a common focus or project.

Analysis and Problem solving concern the means of approaching a problem in order to seek a solution.

Production, in this case, has to do with the results of efforts put into the attainment through to completion of a project.

Communication, or the means of generating and receiving information, is the critical element in any company that enables sharing information.

Common and Disparate Workplace Characteristics

As an heuristic device to help understand differences and similarities between business and education, the information in the following chart has been drawn from the workplace characteristics table used in the interview sessions for this study. The chart is educative for both cultures in that there are a number of similarities that inform the discussion between both cultures contemplating, or in, an education partnership. The chart displays the key terminology, understandings and generalized information drawn from the data and literature. I place it here to provide the reader with an overview of the preceding information. In some cases there is no parenthetical reference after the workplace characteristic. That is because there was no interviewee response or particular reference that I could locate. The generalized information for each characteristic represents my extrapolations from the interview data and literature.

Table of Common and Disparate Workplace Characteristics

Education Workplace	Characteristics	Business Workplace
"Planning" is a more accurate term. Goals and	Project	"Project Planning" is a more accurate term. Goals
objectives for lessons, curriculum, lesson	Management/	and objectives for present and future business
planning, projects, evaluation, school directions.	Project Planning	ventures, directives for specific business projects and events.
Blair (E): "preparing kids for life after		5 2000, 1,4
schooltraining kids to learn; we should be		Don (B): "A very clear focus, we have a very clear
giving them the ability to learn."		plan to get to that focus. Management by objectives."
Eunice (E): "You minister things that you have to		
cover in a course, and as a teacher you think		Mike (B): "In our business training is the backbone
about ways in which kids might learn things,		of the business world, employee development
and so you would set up a criteria and kind of		training. You might want a project management
value the troops and then set them on task."		project , independent service technology could be your training."
Matt (E):"I think that project management and		
project planning is just a little bit too tight for		
what we're doing.		
Not a regular or consistent term. Learning	Service	Accurate term. Provision of material goods,
opportunities to students; provision of material		service, and/or expertise to clients.
goods, service and/or expertise.		
1000		Mike (B): "We're service, in general to make a
Jason (S): "School is a controlled environment		profitYou don't make a profit, you don't hire
where the administration believes they can		more people."
teach you basically skills, for instance on		
jealousy, not to fight in hallways. It comes down		
to the way for the government to control		
everybody and put them into this group, start		
them all off at the same level, giving all the basic		
starting point, that way giving the economy a		

better chance of survival and [education] doesn't keep up with the growing information that we seem to be accumulating dailyTeachers don't have the materials or aren't made aware of a lot of the new developments that are happening in the world."		
Eunice (E): "I am not sure how I might sort of teach that and how that would be obvious in the classroom."		
Accurate term but inconsistent use. Curriculum delivery and presentations, projects, special events.	Greativity	Accurate term. Research and development, products available, marketing and advertising, presentations.
Otto (E): "In order to encourage creativity we need to live with its consequences and we don't, because we use this jargon because we it's so wonderful, and then creativity has to be what I intended in the first place in any eventCrayons is creativity in school and nothing beyond thatYou know, creativity has to be confined to certain parameters. And that for me is problematic, but it's not 'creativity,' it's reading the teacher."		(No specific comments.)
Accurate term. Knowledge development and learning verification tools (tests, examinations);	Assessment and evaluation	Accurate term. Market analysis, client satisfaction, R&D, product diagnostics, of personnel.
A/(E): "We're testing to see what they [students] know or can give back."		Don (B): "In industry we constantly are evaluating an assessing."
Accurate term. Computer labs for general topics (programming in Pascal, HyperCard, some Web	Technology	Accurate term. Information technology more and more as the principal means of communication

work, keyboarding, spreadsheet); generally lagging behind current products and applications; school as deliberate technology (Hodas, 1996); IT demands learning new software and how to use it.		(internet and intranet); generally utilizing current products and applications; advanced programming by specialists and/or specialty software utilization; custom applications; developing presence on the Web (e.g., KPMG, 1998); database and ecomperce. It demands
Ralph (E): "Teachers need to see the value of IT, how it can be used to enhance their delivery of		learning new software and its use.
the curriculum or enhance learning of their students[Non-elective] courses have Provincial		Bob (B): "Comfort with information technology, whether you are in the sciences or public
exams hanging over them and they have a very set curriculum and technology is not part of that	ddigi acas	relations, this is going to be the key determinate increasing links of survival of one's success."
curriculum generally and they [teachers] focus on that."		
Accurate term, limited use. Teacher as individualist/isolationist; student expected to	Independence	Accurate term. Worker is able to complete tasks under minimal supervision; able to think for self
complete tasks.		(No specific comments.)
<i>Matt</i> (E): "I think school teachers tend to be professionally isolated."		
Don (B): "Independence, you see some of that."		
Accurate term. Occasional cross-curricular	Collaboration	Accurate term. Teamwork linked to positive
participation, limited to similar genres (e.g., social studies and English or French, or math and		corporate growth.
physics); teamwork not essential to maintenance		Bob (B):"One of the big problems of getting
of education/schooling.		education partnerships going in the business
		world is nobody wants it on their desk Everybody
Aaron (E): There is not enough conaboration at all."		is interested but everybody is busy. A person says well I don't have the time or a PR person says I
		don't have the budget and a finance person says
Eunice (E): "Collaboration is used a lot in the		weii i don t know anytning about it. so ir you are

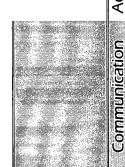
going to make this happen to the degree that it should, you need a real education process going on in the business community."		Analysis/Problem Accurate term. Series of questions related to: solving company vision and realization thereof; profitability of activities; territorial presence; product information and R&D PR.	Don (B): "In industry we have tools like Kepner- Tregoe [1978] which are phenomenal. It's a great methodology."		Production Accurate term. Services and/or products; means/ends.	(Passing comments) Don (B): "Production, assessment, evaluation. In industry we constantly are evaluating and assessing."
classroom I guess I would use that term in as much as when you do good work and you sort of realize consensus about how the classroom is going to operate and also what a piece of work would look like."	Bob (B): I was amazed when I started making visits to classrooms over the past yearThe degree to which teamwork is now really part of the classroom experience."	Accurate term, limited use. Series of questions related to: subject disciplines and delivery of curriculum; student mastery of concepts/information; assessment strategies; student behavior problems; hardware and	material acquisition and funding. Carrie (E): "I think in a sense you are given a product in which you want, or like in [my subject matter], there is a project or a product that you want the kids to produce. And then you back it up from there and you break it down into	specific parts and you teach that so that the kids will become successful in following through the project."	Accurate term, limited use. Students work on task; curriculum delivery; evaluation results.	Carrie (E): "It isn't the money they [students] are trying to achieve, but I hope that it is satisfaction in whatever they are trying to produce, whether

Matt (E): "Production? We would not use that term production. We would use the term accountability."

Accurate term. Parlance of education; Tayloristic hierarchy (vertical); confusion of roles of some participants (teachers: quasi-professional, blueor white-collar workers depending on vantage point; students: economic entities with respect to funding/building, captive audience with respect to legislation between the ages of 5 and 16 in most Western education); specialty terms (lesson plans, semester, timetable, course designations, homework); adopted/adapted terminology and some practices from business (Outcomes-based, Total Quality Management).

Eunice (E): "I don't know think communication in schools necessarily all that great and I think it is time constraint."

Don (B): "Communication is very poor in schools. Within the school and the teachers group it is pretty good, between the school and the school board there are barriers, and between schools there are barriers."



Accurate term. Parlance of business: North American practice tends toward Tayloristic hierarchy (vertical), whereas European and some Japanese practice tends toward more horizontal; clear role delineation of participants (management and workers); specialty terms (project management, R&D, marketing and advertising, CEO, COO, CFO, analyst, reports, outsourcing, e-commerce, inventory, client/customer, satisfaction, guarantee, Outcomes-based, Total Ouality Management).

Don (B): "Very good. It has to be."



Sample Systemic Questions to Ponder Prior to Partnering:

Partnership Purposes

- 1. What are the purposes for seeking a business-education partnership?
 - 1.1. Who should decide those purposes?
 - 1.1.1. Why?
 - 1.2. What are the reasons for initiating the partnership with this partner?
 - 1.3. Is there another more suitable partner?
 - 1.3.1. If so, why is that potential partner being excluded?
 - 1.4. What type of partnership is being sought (see Appendix 3)?
 - 1.5. What are the anticipated enhancements of student learning?
 - 1.6. What are the anticipated detractors from student learning?
 - 1.7. What are the criteria for choosing participants?
 - 1.7.1. Who decides?
 - 1.7.2. Why?
 - 1.8. Who is being excluded from the decision process?
 - 1.9. What are/will be the ramifications on the organization if all stakeholders are not included?
 - 1.10. Who was consulted prior to the partnership?
 - 1.10.1.Why?
 - 1.11. Who needs to be consulted prior to the partnership?
 - 1.11.1.Why or why not?

- 1.12. Who was not consulted prior to the partnership? (i.e., other stakeholders)
 - 1.12.1. Why not?
- 1.13. What are/will be the ramifications of not consulting others?
- 1.14. What is the business partner and what is the type of business?1.14.1. Who are the participants?
- 1.15. Who are the education participants?
 - 1.15.1. What is their rank in the organization (senior administration, administration, teacher, student, parent)
 - 1.15.2. What are the roles of the participants in the partnership?
- 1.16. Who initiated the partnership?
- 1.17. When was it initiated?

Partnership Form/Design

- 2. What are the expectations of each of the partnering groups?
 - 2.1. What are the expectations of each of the partnership participants?
 - 2.1.1. Which, if any, expectations differ?
 - 2.2. What needs to be implemented to ensure the expectations are synchronized?
 - 2.3. Refer to the grid of workplace characteristics. How do the partnership participants and stakeholders understand the terms?
 - 2.4. Will the partnership be open and visible in the community or limited?
 - 2.4.1. If limited, how will it be limited?
 - 2.4.2. Why will it be limited?

2.5. Is geography a critical issue to participants? In other words how much does it matter to the participants where the partnership exists? Rate this on a scale of 10 with 1 being low and 10 being high.

Partnership Structure

- 3. What is the timeframe for
 - 3.1.1. implementation?
 - 3.1.2. induction?
 - 3.1.3. wrap-up?
 - 3.2. What are the levels of governance and the roles of the participants (see Purposes)?
 - 3.3. What are the steps of implementation?
 - 3.3.1. of evaluation?
 - 3.3.2. of the completion?

Questions to Ponder During the Partnership:

The following questions are for stakeholders and participants in a partnership that is already underway:

Partnership Purposes

- 1. Who are the participants?
 - 1.1. What are the roles of the participants?
 - 1.2. Are there additional participants who should be part of the partnership that are not present?
 - 1.2.1. If so, who are they?
 - 1.3. How will they bring benefit to the partnership?

- 2. Are the goals of the partnership being achieved?
- 3. What problems have been encountered?
 - 3.1. Are these problems of purpose, form/design or structure?
 - 3.2. What have been the solutions?
 - 3.3. Have the solutions fixed the problem?
 - 3.3.1. What were the shortcomings of the solutions?
- 4. What additional resources are needed to achieve the goals?
 - 4.1. From whence will these come?
 - 4.2. Who will administer them?
- 5. What additional goals need to be added or considered?
 - 5.1. How do/will these fit into the original goals set?
 - 5.2. What changes or alterations need to be done to the original goals?
 - 5.2.1. What impact do/will the new or altered goals have on the direction of the partnership?
 - 5.2.2. What impact do/will the new or altered goals have on the participants?

Partnership Form/Design

- 6. Are any of the anticipated enhancements to learning evident (see expectations)?
 - 6.1. If so, which ones?
 - 6.2. If not, why not?
- 7. What are the detractors from achieving success to date?
 - 7.1. What solutions have been discussed?
 - 7.2. What are the possible problems associated with the solutions?
 - 7.3. What is the best route to achieve success?

- 8. What is the workplace of the partnership (i.e., factory, office, school, other)?
- 9. Where is the partnership to be situated?

Partnership Structure

- 10. Is the partnership still intact?
 - 10.1. If not, how has it changed?
 - 10.1.1. Who decided on the changes and how?
- 11. Who will lead the partnership?
 - 11.1. How is the leadership to be determined (see Purposes)?
- 12. What is the timeframe
 - 12.1. for implementation?
 - 12.2. for evaluation?
 - 12.3. for completion?
- 13. What are the means, ways and specific steps
 - 13.1. to implementation?
 - 13.2. to evaluation?
 - 13.2.1. What evaluation techniques will be used?
 - 13.2.2. What will these prove?
 - 13.3. to completion?
- 14. What are the job roles and who will fill them (see Purposes)?
- 15. What resources are necessary
 - 15.1. for implementation?
 - 15.2. for continuation?
 - 15.3. for completion?
- 16. What transportation needs have to be met?

Culture: A Brief Discussion

Agger's (1992) work in the subject defines *culture* as anthropological and demonstrated as "any expressed activity contributing to social learning," versus "high culture, or a more academic understanding or fostering" (p. 2). That is similar to A. Bloom (1987) in his research on the topic and who believes that culture "is the unity of man's brutish nature and all the arts and sciences he acquired in his movement from the state of nature to civil society" (p. 185). Focusing more on the intangible and fluid qualities, Hebdige (1993) informs us that, "culture is notoriously ambiquous" (p. 359), an echo perhaps of Bhabha's (1994) "'inter'—the cutting edge of translation and negotiation, the *in-between* space—that carries the burden of the meaning of culture" (p. 38; italics in original). Milner's (1994) comments on culture, and in apparent agreement with Hebdige, points out that culture "has become a theoretical problem...because it is already socially problematic" (p. 4), by which he means it is nigh impossible to accurately pinpoint a precise definition of culture (also During, 1993; Kymlicka, 1989; Morin & Bertrand, 1979). Additionally, Mickelson, Okazaki, and Zheng (1995) speak of society being comprised of "a cultural model or folk theory that serves as a framework for interpreting the world" (p. 88). Budick and Iser (1996) suggest a similar view of culture, that "elementary and highly distinctive forms of any culture, its rituals, are not so much 'expressions' of some cultural core. They are rather, to some extent, institutionalized fictions invested with 'as-if' qualities to fill out, by mythical designations, the threat of cultural void" (p. 199).

For Jameson (1995), there is another dimension to consider: "American, postmodern culture is the internal and superstructural expression of a whole new

wave of American military and economic domination throughout the world: in this sense, as throughout class history, the underside of culture is blood, torture, death, and terror" (p. 5).⁶³ I have included his comment about culture here first of all to indicate that he has a comment about the topic and because his comment is not compelling enough to put with the others in the discussion. The judgement on America and the corresponding connection with all cultures on the planet is not wholly accurate. For instance, American foreign policy is not about world domination or the deliberate shedding of blood as fallout from moving about in the world with its economic aid and capitalistic agenda. And this is not the place to delve into American culture and the cultures of education and business, as interesting as that would be.

At the same time, however, culture lacks a unified theory, or as Milner (1994) claims, "cultural theory is, in fact, one of the central discontents of our civilization" (p. 4). In other words culture is a vague representation, or sign, of a peculiar group of persons. Fairlamb (1994) claims that, "cultures are incommensurable in the sense of lacking a single principle of comparison to which all would agree, and which would bring all other principles into line. Cultures, in other words, lack a reductive principle to adjudicate their differences...Members of the *same* culture do not have such principles either" (p. 59). In a sense there are multiple "culture narratives." That differs from the "social" which, in the context of this thesis at least, is the collective and contractual, or political, arrangements among people inhabiting a common geophysical space.

⁶³ For an excellent review and challenge of postmodernism see Eagleton (1996) and Norris (1995).