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Creating Human and Social Capital for Developing the Global Learning Society: Toward an educational model for graduate business education

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Abstract

This chapter explores the role of human and social capital in developing a global sustainable learning civilization. Industrialized nations have been successful in creating know-how and developing technological solutions with fruitful economic gains. However, the challenge of creating a global learning society to support the transition to sustainable ways of production and consumption calls for a marriage of technical knowledge (know-how) and ethical knowledge (know-why). The business world is considered a strong force in societal change, and business education is revisited from a systemic and evolutionary perspective. Business education can create the conditions for the creation of human capital and the consolidation of social networks and relationships that enable evolutionary development.

GLOBAL CHALLENGES AND OPPORTUNITIES

What is the business of business in a rapidly changing world? What kind of relations are needed between corporations, educational institutions, and society at large? Can business schools make a significant contribution — not only for the economic strengthening of industries but also for the sustainable development of the global community? The contemporary survival imperative amounts to nothing less

than the challenge to create new forms of production, distribution, and consumption... and new ways of learning, living, and enjoying life.

Science and technology have flourished in recent history. Unprecedented opportunities for human development and well-being have become accessible to millions of people in the privileged sectors of society, the world over. At the same time, the progress of the last 150 years has had some “side-effects” — effects which we had not foreseen or do not want to think about — (Meadows, 1972) that cannot be ignored anymore. Population growth, social inequities, hunger, armed conflicts, water shortages, and pollution all are dimensions of a “Total Problem” (Merry, 1995, p. 78) or “problematique” that threatens the stability of societies and ecosystems around the world.

Our global civilization depends on the finite resources of this planet. We know it, and we even have the knowledge and the means to change course. “If we do not change direction, we are likely to end up where we are headed” says a Chinese proverb. The human species is suffering from a serious paralysis. More than the finitude of this planet, the real threat to our survival is the limited mentality and outdated cultural myths and values that result in unethical behavior of human beings (E. Laszlo, 1989, p. 14). The myth of the “Grand Narrative of Progress” continues to exacerbate the world problematique and to jeopardize our future possibilities. “For the first time in history, the survival of our entire species is, clearly and imminently, tied to the choices we are making and the myths that shape them” (Feinstein, Mortifee and Krippner, 1998, p. 205). They advocate myths based on sustainability and connection rather than on progress and autonomy.

Bowers (1993) considers that educators are not yet aware of the cultural myths and assumptions that underlie their practice. Most educational innovators are still “caught in the myth of an anthropocentric universe.... The avalanche of information on the human impact on the environment is now so great that it is almost inconceivable that it is still being ignored by people who represent themselves as the leaders in education” (Bowers, 1993, p. 115).

We do live in interesting times. We have the challenge to create new forms of production, distribution, and consumption. We have the opportunity to create new ways of learning, living, and enjoying life. We need to explore what it means to be human in an endangered world. In essence, we need to reinvent ourselves.

Business and Educational Transformation

From a systems perspective, all human institutions, individuals and the environments in which they live and operate are inextricably interconnected in a complex web of mutually influential and inseparable relationships. The challenges and opportunities in the business world are linked to the ones in the natural world and the rest of society. Business plays a leading role in shaping society. Our changing world is by and large the result of the increase rates of exchange of people, goods, and information fueled by business operations. Governments, educational institutions and communities around the world follow the directions of business.

Business, as we know it today, is not the “universal human activity it is sometimes thought to be. It is, instead, a remarkably modern and culturally peculiar phenomenon” (Solomon & Hanson, 1983, p. 34) whose infancy was triggered by the industrial revolution of the 18th century and supported by individualism and the Calvinist Protestant work ethic. From an evolutionary perspective, it is not inconceivable to consider the transformation of the ends and means of business.

“For thousands of years, business existed only at the fringes of society. Society thought little of people in business, and people in business expected little of society. Profit was their only reward because power, social status, and even social acceptability were closed to them. In this context,... the idea that making a profit was the only goal of business might have some sense” (Solomon & Hanson, 1983, p. vii). But in a time when the values of the business world largely influence the values of society as a whole and the possibilities of future generations, the purposes and goals of business need to be questioned and expanded.

The challenge for the evolution of the business world is clearly articulated by Natrass and Altomare (1999) who explain that “it is no longer sufficient to be a smart organization, one that can scan the commercial environment, detect variations, and react accordingly. If we restrict ourselves to reacting to signals when it comes to human impact ... we may well end up focusing our organizational resources just on minimizing the pain of irreversible damage. Our business organizations need to become conscious of the evolutionary role business plays in the future of the planet and to take responsibility for that role.” Following the image of business as an ecosystem embedded and entangled in a socio-cultural and bio-physical context, we can appreciate the need to move from reactive and even proactive organizational strategies to an interactive and anticipatory mode of co-evolution.

The economy is one of the most relevant aspects of the direct context in which business operates. However, a healthy economy does not need to be divorced from a healthy society and ecosystem. An integrated view of economy, society, and nature is encompassed by the notion of a sustainable economy which, according to Milbrath (1989, p. 82), would preserve and enhance a well-functioning ecosystem; provide humans with the products and services necessary for a good and dignified life; provide opportunities for fulfilling work and self-realization; achieve and maintain economic justice; and utilize resources at a sustainable rate that does not deplete future generations. Many organizations are creating business opportunities through innovations inspired by such a vision of sustainability.

Education is a natural strategy to promote the transition toward a sustainable society. Through the expansion of perspectives, the acquisition of relevant and meaningful knowledge, and the development of new skills and competencies, education can empower individuals and groups to participate in change processes. However, educational institutions have embodied the cultural myths and assumptions inherited from a Newtonian and mechanistic view of the world and have remained vastly removed from the environmental crisis (Bowers, 1993, p. 115). In these critical times of choice and possibility for the future, it is essential that educators assume a proactive role as change agents. We need to understand the dynamics of change and global trends and be prepared to empower individuals and groups to respond ethically and innovatively to the “new realities” (Drucker, 1989). While in stable and certain times, educators could afford to be the “sage on the stage,” making sure that learners acquired known and established facts, the complex and dynamic nature of the present demands that they become the “guide on the side,” facilitating collaborative, interdisciplinary, and project-oriented learning experiences.

This transformation of educational means and purposes goes hand-in-hand with the evolution of technology. From a macro-historical perspective, there has been an exponential rate of change in the nature and use of human technologies: from survival technologies during the half million years of the hunter-gathering stage, to craft-based technologies during the ten thousand years of the agricultural stage, to machine technologies during the five hundred years of the industrial stage, to intellectual technologies during the last fifty years of the post-industrial stage (Banathy, 1996). And we can start envisioning a new stage of societal evolution in which biotechnologies, nanotechnologies, cybertechnologies, and ecotechnologies

will play a crucial role in shaping the characteristics of the emerging era that will need to be complemented with “soft-technologies:” technologies of human interaction for emancipation, group empowerment, and sustainable development in partnership with the life support systems of planet earth (Laszlo, 1999).

In fact, the exponential growth of technological innovation has become auto-catalyzing and now continues to increase the gap between the technological intelligence and the socio-cultural intelligence of our species (Banathy, 1996). That is, advanced human societies have been able to develop sophisticated technologies to support production, communication, and military processes, and yet these technologies have not always been used in ethical and beneficial ways — neither for humanity nor for the ecosystems on which life depends. Closing this gap means developing a moral sensitivity – an ethical competence – appropriate for guiding future techno-scientific and socio-cultural innovation.

Merchant (1996) explains the paradigmatic assumptions that underlie three ethical frameworks: egocentric, homocentric, and ecocentric ethics. Her distinctions help identify the dominant ethical stance of modern business: the egocentric ethic. In this approach, the wellbeing and happiness of the individual is sought after above all else. It encourages the individual to act in ways that bring about the personal good, assuming that a society constituted of fulfilled individuals equals the collective good. However, there are some pitfalls to this ethical position. “Because egocentric ethics is based on the assumption that the individual good is the highest good, the collective behavior of human groups or business corporations is not a legitimate subject of investigation” (Merchant, 1996, p. 521). Also, “it includes the assumption that humans are ‘by nature’ competitive and capitalism is the ‘natural’ form of economics” and as a result “ecological effects are external to human economics and cannot be adjudicated” (p. 521). The fact is that the trickle down economic theory has proven wrong: rich people become richer while poor people become poorer. In other words, the egocentric ethic does not bring about social good. Another possibility is the homocentric ethic, which goes beyond individualistic self-interest in order to promote the collective good. However, it assumes that humans have a special place in the universe and that this entitles them to exploit the rest of the world for their own purposes. So the homocentric ethic is good, but not good enough as a new business ethic. Following Merchant, the ecocentric ethical approach is the one to bring balance between human progress and preservation of the natural world.

Koestenbaum (in Labarre, 2000) points out that “an evolutionary transformation of who we are, how we behave, how we think, and what we value” (p. 226) is necessary to resolve the paradox between business as usual and the contemporary global challenges that call for social and environmental responsibility. He connects this evolutionary transformation to the basic human quest for meaning, purpose, and fulfillment which have been left behind in the hectic life style of industrial societies. Unless such issues of purpose and meaning are addressed, humans cannot make intelligent decisions come Monday morning – much less develop a long term systemic strategy toward sustainability. Human depth makes business sense, he argues, and it is precisely the depth required to move from the egocentric business ethic to a broader perspective that advances the wellbeing of individuals, societies, ecosystems and future generations. “The more you understand the human condition, the more effective you are as a business person” (p. 224). And the more we understand the interconnected nature of the world, the more competent we are as shapers of sustainable and evolutionary organizations. To focus beyond the bottom line does not imply forgetting about the “profit motive” but transcending it toward a mode of wealth creation that pursues personal, social and ecological gains in addition to financial results.

Human and Social Capital for Evolutionary Development

Business is a global change agent. As mentioned above, our changing world is by and large the result of the increasing rate of exchange of people, goods, and information fueled by business operations. Information and communication technologies make distances disappear and connect people from diverse cultures and backgrounds. Multinational and transnational corporations go beyond geographical boundaries, and economic interests are the motors for the integration of regional commercial blocks.

Traditionally, the relation between business operations and development initiatives is limited to issues of economic growth. The assumption is that a stronger economy will increase the standard of living of the members of society. However, after many years of neo-liberalist policies, this has still to be proven. The relation between business and development needs to be seen through different lenses. Business education can be considered the bridge between the private and the social sectors by contributing to “the theory and practice of a more humane society ... one

in which we see ourselves as members of a vast network of interdependent connections, where we take each other's welfare into account and build relationships of mutual respect, honor, and understanding, and where we contribute to each other's human development and the fulfillment of each other's hopes and aspirations” (Baker, 2000).

“Although some neo-liberals and neoconservatives and most libertarians continue to believe that healthy economies create vibrant communities, in fact, the reverse is more often the case. A strong community is a prerequisite for creating a healthy economy because it alone produces social trust” (p. 5) (Rifkin in Falk, 2001). If this assertion has some truth to it, development strategies have been devised in the direction opposite to that in which they should have been devised. Instead of promoting economic growth as the vehicle for vibrant communities, we need to seek the means to promote personal, social, and ecological well-being, through the creation of human and social capital, as the requisite conditions for vibrant and sustainable economies.

The link between business, business education, and development is particularly relevant in developing nations. In Mexico, for instance, the gap between the rich and the poor continues to expand at an alarming rate and the ecological deterioration of the country is palpable. Knowledge is power. But it is up to those with access to knowledge to decide how to use that power: as power over others so that only an elite few can enjoy indulgent life styles, or power to empower others in order that they may engage in meaningful and sustainable forms of social organization.

Knowledge, learning, and meaning creation

Management has evolved from the efficient allocation of tangible factors of production during most of the twentieth century to the creation of conditions for innovation and value generation based on human and social capital. Today, more than 50 percent of the gross domestic product (GNP) in developed economies is knowledge based. The high technology and pharmaceutical industries are notable examples of the importance of knowledge in the new economy. And even in the manufacturing sector, the bulk of the added value activities come from intellectual work such as research and development, process design, and product design (Dess, 2001).

Not only is knowledge production increasing, the rate of knowledge production is itself increasing and accelerating. However, questions of what kind of knowledge is appropriate for socio-ecological well-being, who should be involved in its creation, and how it should be created, managed and positioned to evolve are as yet infrequently considered in development strategies. If knowledge is to be put to good use for human betterment, we need to democratize the processes through which knowledge is created, stored, shared, and used (Laszlo & Laszlo, 2002).

Figure 1 presents the “pyramid of meaning” which places knowledge in context with other forms of meaning; some more rudimentary than knowledge, such as data and information, and some more sophisticated, such as understanding and wisdom.

The difference between knowledge, understanding, and wisdom has deep implications for the design of educational systems. Knowledge and information can be taught and formally transmitted. But there are limits to teaching. Research on learning, cognitive psychology, educational technologies, and so forth, are pointing out to the need to engage learners in an active construction of meaning.

Andragogical and learner-centered approaches are some of the sorts of responses that support the use of knowledge for the creation of understanding. Understanding cannot be taught: it has to be created by each person for themselves since it involves active engagement in learning and meaning creation. As a result, your understanding of a situation is unique to you, and by learning and collaborating together we can expand our individual understanding in order to share a common cognitive map. This means that for the upper parts of the pyramid of meaning, the educational processes needs to move from teaching to learning facilitation. Our understanding of phenomena and events can serve as the basis for creating the conditions for learning that allows learners to create their own understanding of phenomena and events.

The lower portion of the pyramid refers to forms of knowing that are more specific, but also more limited. It feels more comfortable and more certain to answer the “what” questions, especially when we isolate the object of study from its context. In this sense, the lower portion is concerned with reductionistic approaches which assume that adding together an understanding of the pieces will result in an understanding of the whole. “How” questions are more challenging to deal with; there are many possible paths to the desired outcome, as described in the examples given above. But “why” questions are more significant since issues of

appropriateness and goodness of fit must also be considered. Understanding integrates reason and values, intellect and intuition. “Why” questions consider the impact and ethical implications of a decision according to the situation and its context. In this sense, understanding is more systemic, more holistic. The answers at the level of wisdom also deal with “why” questions, but now they engage your emotions and your values, as well. Simply put, wisdom, is understanding plus love. With this framework in mind, knowledge makes sense only as an enabler to reach levels of understanding and wisdom that will permit a positive impact on the development of societies and on the evolution of human civilization as an integral part of this living planet.

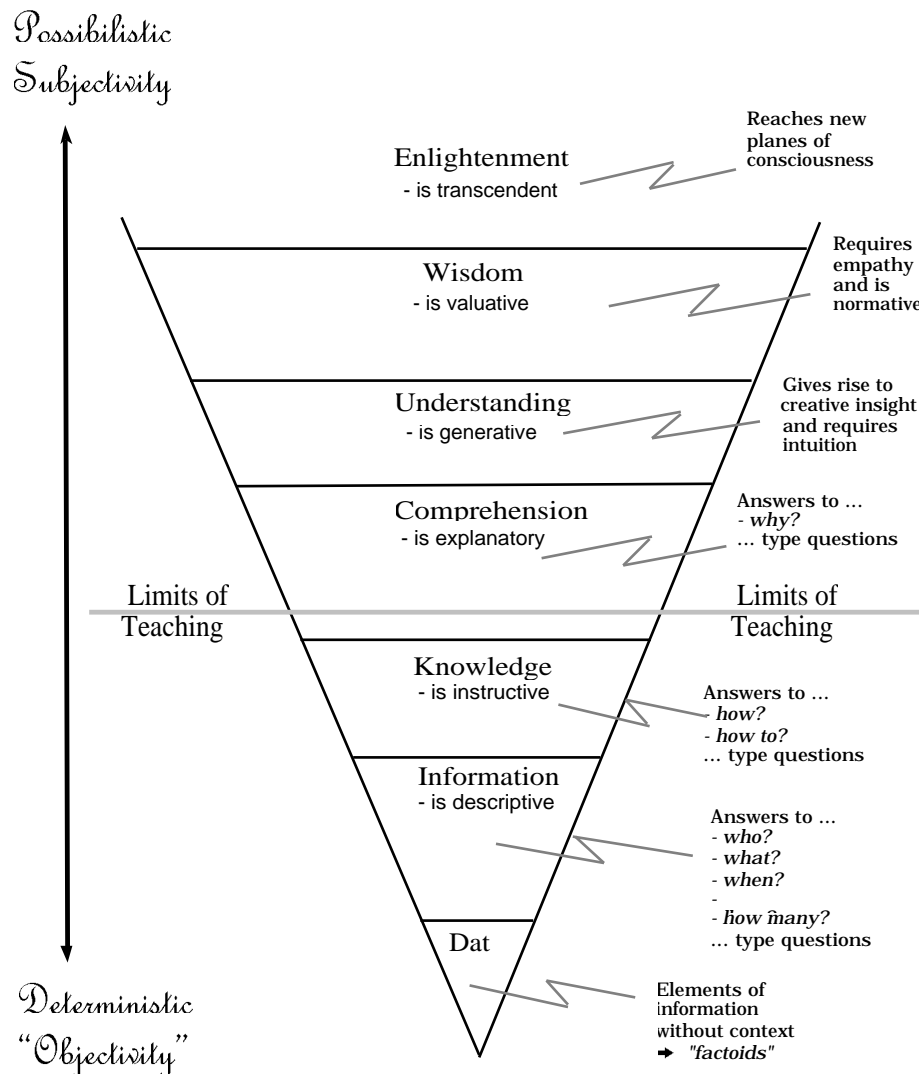


Figure 1. The pyramid of meaning

Industrialized nations have been very successful in creating know-how and developing technological fixes with fruitful economic gains. However, the challenge of creating a global learning society to support the transition to sustainable ways of production and consumption requires linking the technical knowledge (know-how) with the ethical knowledge (know-why). Knowledge should not be seen as an end product but as an enabler to support ongoing learning and development that moves individuals, organizations, and communities to levels of understanding and wisdom — that is, to shared meaning creation.

The knowledge economy is already a reality, not only for many organizations but also for nation states. Processes related to knowledge creation, learning, and innovation have a social impact just as significant as economic initiatives (OECD, 2001, p. 17). “The wealth of a nation no longer depends on its ability to acquire and convert raw materials, but on the abilities and intellect of its citizens” (TFPL, 1999, p. 2). Both at the organizational and societal levels, there is an increasing need for robust understandings of the role of human capital and social capital in value creation processes.

The role of human and social capital

The OECD defines human capital as the knowledge, skills and health embodied in individuals” (2001, p.12). In contrast to the concept of intellectual capital, human capital is a more humane concept. The source of wealth is not limited to cognitive processes and products. It also includes the overall well-being of a person (physical, psychological, emotional, and spiritual) that contributes to his or her ability to perform in creative and outstanding ways.

“Social capital refers to the norms and networks facilitating co-operation either within or between groups” (OECD, 2001, p. 12). Social capital comprises the notion that social relations can produce economic and noneconomic goods as well as individual and collective gains. It can take the form of commitments within a group, trust, reciprocity, intergenerational closure, and norms and sanctions, to mention but a few examples (Paxton, 2002, p. 256).

Portes (in Falk, 2001) distinguished among various forms of capital: While economic capital is in people's bank accounts, human capital is inside their heads

and embodied in their personhood. And even less tangibly, social capital inheres in the structure and dynamics of their relationships.

At the organizational level, social capital is “a resource reflecting the character of social relations within the organization, realized through members’ levels of collective goal orientation and shared trust” (Leana and Van Buren, 1999, p. 540). Burt (in Dess, 2001) argues that “while human capital refers to individual ability, social capital refers to opportunity.” From an organizational perspective, this view suggests that managers add value by coordinating people, making connections and facilitating relationships between individuals in order to get the right people together and create new opportunities.

At the societal level, social capital can help create democracy in a country that is not democratic and it can maintain and improve already existing democracies (Paxton, 2001, p. 257). Social capital foments the creation of a public sphere where the quality of citizen participation is improved. This public sphere represents a space of dialogue where democratic virtues such as open-mindedness, tolerance, and respect for opposing viewpoints can be strengthened (Paxton, 2002, p. 258). In addition, a reciprocal relationship between trust and democracy has been found, that is, the presence of trust in the fabric of society promotes democracy, and democracy promotes trust in society (Paxton, 2002, pp. 271-272).

“By bringing human and social capital together, we increase people's capacity to learn and respond to change. The networks, shared values, and trust people acquire through interaction bring all the appropriate knowledge together in the process of shaping and shifting their self-perception or identity to actively manage learning and change” (Falk, 2001). In fact, it is the coevolution of human and social capital that underpins advantages at both the organizational and societal levels (Nahapiet & Ghoshal, 1998, p.15).

The creation of these types of capital is becoming a priority for multiple sectors of society with a stake in sustainable development. In particular, for business and education, as well as for business education.

Rethinking development

Development initiatives for many years have been focused primarily on economic concerns. New research indicates the importance of expanding this conception so as to include strategies for the development of human and social

capital as well as strategies for social and environmental sustainability (OECD, 2001; Laszlo, et. al., 2001). The trend is to shift from increasing the standard of living (measured in quantitative economic terms) toward more qualitative and quantitative indications of the quality of life, closely linked to subjective issues of happiness and socio-ecological well-being.

Development and growth are different types of change, and yet they are often confused or conflated. Growth is a process that involves change in quantity or size. Development involves a change in quality or condition. There are limits to growth, as we have learned over the last decades, because we live in a finite planet. But there are no limits to development. In fact, development usually involves doing more with less.

It has now become a survival imperative to gain a better understanding of the developmental pathways that take into consideration the whole of human experience in its socio-cultural and bio-physical environment. It implies nothing less than a re-visioning of Schumacher's (1973) core idea of "economics as if people mattered." The design of strategies that promote what we call "evolutionary development," as any other human activity, is the result of particular Weltanschauungen. Consequently, in order to obtain a clearer image of the possibilities of evolutionary development, it is essential to adopt a new set of assumptions:

The new concept of development takes account not only of economic growth but also of all those parameters that reflect the quality of life, full enjoyment of creative capacity and observance of human rights, which the principal decision-makers should take into account so that development is not owned and dispensed by a few but is a common undertaking on an international, multilateral scale, with the human being as its centre, its sole agent and its beneficiary. *All that is needed is a new look at the world, and different premises.* [emphasis added.] (Mayor, 1990)

Evolutionary development is a view of human initiatives that promotes improvement of conditions, well-being, and quality of life as part of a larger pattern of long-term change. Evolution, according to the most recent scientific understanding of the term (e.g., Laszlo, 1996; Prigogine, 1984; Bohm, 1980), is a process of increasing complexification and negentropy importation in complex dynamic systems with a throughput of information and energy. In other words, evolution works against the second law of thermodynamics and involves self-organization, creativity, and transcendence. If we were to consider the workings of general evolution — i.e., the dynamic isomorphic pattern of change that manifests

itself variously in physical, chemical, biological, psychological, societal, and cosmological systems — as a guiding framework for development initiatives, we could usher human societies toward dynamic states of socio-ecological sustainability. This is the promise of evolutionary development.

Banathy (1996) sees learning as “the greatest source of change in social systems,” while Milbrath (1989) considers “social learning [as] the most viable route to social change.” The transformative power of learning perceived by Banathy and Milbrath goes beyond schooling into a form of lifelong collaborative learning fully integrated with socio-cultural life. Learning, as a process of human betterment that can be fostered through both formal and non-formal education, is gaining support among international organisms whose research recognizes the fact that learning has a social impact just as significant as economic initiatives (OECD, 2001, p. 17).

These new forms of capital represent the foundation of true democracy (i.e., a participatory and anticipatory democracy) necessary to enable purposeful and ethical socio-cultural evolution (Banathy, 2000). Participatory democracy is an ideal form of governance in which all citizens are involved and share responsibility for making appropriate decisions and choices that will enable the well-being of society. Anticipatory democracy is a special form of participatory democracy that future-oriented and creative, not problem-oriented and reactive. Unless individuals and groups (i.e., average citizens and local communities) have access to knowledge and learning opportunities, have the social context for collaboration and resourcefulness, have the competencies to shape their present conditions and to influence their future, and have the moral sensitivity to make informed and life-affirming choices, we cannot expect any development initiative to be successful enough – evolutionary enough — for the transcendence of global problems and the emergence of a new social order.

We have much to learn from nature with regard to self-organization and evolutionary governance, among other things. As Augros and Stanciu (1987, p. 231) point out, “her attributes of simplicity, economy, beauty, purpose, and harmony make her a model for ethics and politics.”

The extent to which we inform our actions through a transdisciplinary theory of evolution will mark the extent to which the consequences of our actions and the implications of our thoughts will contribute to developmental pathways that are either more or less sustainable. Mihalyi Csikszentmihalyi (1993) put it quite plainly: “In order to make choices that will lead to a better future, it helps to be aware of the

forces at work in evolution.” The emerging evolutionary paradigm brings with it a new sense of human possibilities, responsibilities, and sensibilities.

INQUIRY INTO A FLEXIBLE EDUCATIONAL MODEL FOR GRADUATE BUSINESS EDUCATION

The creation of human and social capital for evolutionary development is an educational task in the broadest sense possible. Therefore, it implies a redefinition of processes and contents of formal academic programs so that they correspond to emerging realities. “An actual change to a more sustainable way of life... require(s) a degree of change in understanding and attitudes. Education is one of the ways in which moral values and positions are developed in society. A transition to sustainability may therefore require some change in current educational programmes” (Clayton & Radcliffe, 1996, p. 237).

Our work in the educational arena takes place at EGADE: the Graduate School of Business Administration and Leadership of the Monterrey Institute of Technology (ITESM), in Mexico. EGADE has been ranked as the number one business school in Latinamerica for four consecutive years by America Economia (a Dow Jones Group publication). For three years in a row, it has been recognized as the best business school in Latinamerica according to the British journal, Financial Times. It also has been positioned among the 50 best business schools of the world by the German magazine *Handelsblatt* and in the top 15% in the world addressing issues of Social Innovation and Sustainable Development by the Aspen Institute and the World Resources Institute.

Business education plays a key role in shaping the global learning society and in recognizing the economic and developmental value of human and social capital. Nevertheless, business education has traditionally failed to help business students achieve sufficient educational breadth, particularly with regard to their role and responsibility in an increasingly interconnected world that demands inter-personal, inter-cultural, and ethical sensitivity (Zlotkowski, 1996).

EGADE faces the same challenges that every business school in the world faces: to engage in a dynamic and ongoing exploration of the purposes and means of graduate business education in order to respond to the rapidly changing needs of business and society. Because EGADE is located in Mexico and serves primarily the Latin American market, the characteristics of this challenge are rooted in the social,

economic, political and environmental conditions of this developing region of the world.

Evolving education

When a person becomes part of a social system, much of the knowledge required to carry out his/her functions has to be picked up and learned progressively in day-to-day interactions, as well through educational processes devised to transmit cultural values and practices. However, history shows that there is neither sufficient learning from past experiences, nor efficient preservation of vital knowledge from the present, for societies to evolve purposefully. This implies new challenges for both societal learning and formal education. Learning, inquiry, and dialogue are processes necessary for meaning creation. These knowledge processes call for human beings capable of engaging in self-directed and collaborative learning. But learning of what? And how?

The need to focus on learning, rather than on teaching, is becoming more and more evident. However, which type of learning to focus on is an issue that still needs exploration. Although necessary, it is not sufficient to learn exclusively from the past. We must invent the future into existence also through our aspirations of what should be. Banathy differentiates between maintenance and evolutionary learning (1996, p. 318-319). The former is adaptive and involves the acquisition of fixed viewpoints, methods, and rules of dealing with known and recurring events. Maintenance learning is related to the mastery of mainstream perspectives, knowledge and methods that have been validated and accepted over time. It maintains the status quo, and is appropriate during periods of socio-cultural stability. Maintenance learning is more concerned with information and knowledge of “what is” and “what works.” Evolutionary learning, in contrast, is innovation-focus learning that enables the learner to cope with uncertainty and change, transcend old perspectives and design evolutionary strategies for socio-ecological success. It represents a more appropriate learning strategy during periods of socio-cultural instability or macroshifts when there are no clear guides to the future.

Educational systems in general (and business schools are no exception) have been focused primarily on maintenance learning and the creation of knowers who know a lot about existing knowledge and approaches in their area of disciplinary studies. But the contemporary global challenges and opportunities that face

humanity, collectively, call for evolutionary learning and the empowerment of lifelong learners capable of generating transdisciplinary knowledge and new processes that respond to the changing socio-cultural and bio-physical environment (Laszlo & Castro, 1995). Such learners act as multipliers of human and social capital and represent a key factor in evolutionary development (see figure 2).

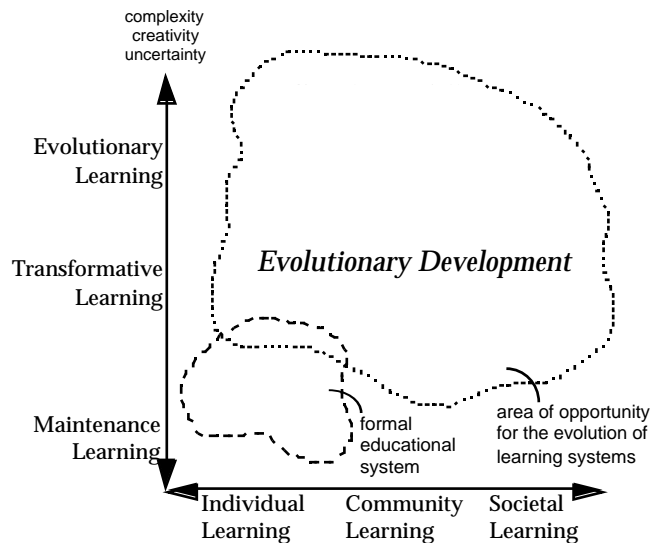


Figure 2: Evolving learning for development

K.C. Laszlo (2000, 2001, 2003) has outlined the basic conditions for the design of Evolutionary Learning Community. This form of community provides learning environments where people can learn together about the interconnected nature of our world, the ecological impact of our individual and collective choices, and the joy of finding a meaningful way to contribute to the emergence of sustainable and evolutionary futures. Einstein and Russell (1957) considered that “we have to learn to think in a new way” in order to apply our knowledge ethically and to provide creative solutions to the challenges that confront us, collectively. To learn to think in a new way — that is, to go beyond reductionism into a systemic mode of meaning creation — may depend on our ability to learn how to learn in new ways since the dominant educational system is still grounded in reductionistic worldviews and continues to propagate outdated myths and values. Indeed, educational processes have been perpetuating the Grand Narrative of Progress (Feinstein & Krippner, 1988) that maintains or exacerbates the global crises, rather than creating alternatives and solutions.

By using the methodology of Evolutionary Systems Design (ESD) (A. Laszlo, 1999; Laszlo & Laszlo, 2000; K.C. Laszlo, 2001; A. Laszlo, 2002), the co-creation of ELC takes the form of participatory conversation, learning, design and action. An ideal image of the future and of the desired outcomes agreed upon by those engaging in the inquiry, guide the collaborative exploration that moves from an informed vision of “what should be” to a concrete reality of “what can be.” The process and results of this learning and design journey foster in the participants attributes such as lifelong learning, systems thinking, environmental stewardship, planetary citizenship, authenticity, empathy, creativity, pragmatism, optimism, and a passion for affirming life (K.C. Laszlo, 2001, p. 387-388). The ELC seeks to serve as an embodiment of a balanced partnership between humans and nature, a place/space for future thinking, for ongoing learning, for integrating work and play, and for producing a wholesome and evolutionary quality of life.

The pyramid of meaning (figure 1, above) illustrates the distinction between reductionistic (bottom of the pyramid) and systemic knowledge (top of the pyramid). This distinction is correlated with the evolution of science as an inquiring and learning system (Checkland, 1981, p. 50). The quest for knowledge and understanding is a human enterprise that moves continually toward higher levels of complexity, less clear-cut answers, and more evolutionary possibilities. Inquiry in the social and human sciences is moving away from quantitative research and advancing toward qualitative, dialogue-based, and action-oriented forms of investigation. This is the direction of the inquiry into flexible educational models. Following the assumptions of the participatory inquiry paradigm, our research seeks “to change the world... [since] participation implies engagement which implies responsibility... [thus] participatory research is thus essentially transformative” (Heron & Reason, 1997, p. 287-288). The world view that supports collaborative forms of inquiry is fundamentally participative, systemic, pluralistic, and egalitarian. It is based on emancipatory education (e.g., Freire, 1997; Hooks, 1994), spirituality and ecology (e.g., Eisler, 1987; Macy, 1991) and supported by systems thinking and the sciences of complexity (e.g., Checkland, 1983; Goerner, 1994).

“Form follows function” is a well-known design principle. This same principle holds true with regard to research, as well. We cannot design an innovative educational model by using traditional or pre-established research methods. Our educational design process involves an inquiring and learning process that unfolds as we advance in the task. We call this process “research as learning for

action.” That is, researching by learning and learning through researching with the objective of acting – or improving some aspect of a concrete educational reality. Research as learning for action involves iterative processes of dialogue, study, experimentation, observation, participation, and reflection in a collaborative mode among an interactive group of professors and students.

Scholarship and graduate business education

In a recent discussion with a colleague, the following quandary emerged: should doctoral education primarily prepare students to publish papers in refereed journals, or should it empower them as scholars with intellectual passion for knowledge creation that inspires and enables them to explore new frontiers of business understanding? And what of the issue the relevance of their study?

Successful graduate business education needs to prepare students to be the lionesses of two worlds. To boil scholarship down to “hits” (i.e., accepted publications) is meaningless (Mowday, 1997). And yet, publishability is a clear survival skill in academia. However, graduate education has a very important responsibility that is only commensurable with its privileges. For each 100,000 inhabitants, Mexico has 2 researchers with a Masters degree and only 0.10 with a Ph.D. Canada has 17 Masters and 4 Ph.Ds. and the US has 19 Masters and 5 Ph.Ds for the same proportion of their respective populations (Molina, 1995). At least in Latin America, the highly educated people cannot remain disassociated from their social responsibility to contribute to the development of their societies (although this is actually no more true for Latin America than for any other area of the world). A return on the investment made for those higher degrees is expected in times when knowledge and its processes are the most important sources of value for the sustainable, evolutionary development of society.

In association with such trends as e-learning, customization and decentralization, the primacy of human and social capital, knowledge creation and the merging of work and learning, “the teaching profession has to reinvent itself or disappear” (Talisayon, 2001). The problem with the teaching profession is that it has become isolated from a broader conception of scholarship that is the core of the purpose of a business school. Boyer (in Mowday, 1997, p.339) defines scholarship as comprised of four interrelated processes: scholarship of discovery, scholarship of integration, scholarship of application, and scholarship of teaching. In other words,

scholarship is the pursuit of knowledge through research, synthesis, practice, and education. The thread that links these dimensions of scholarship is learning — which is precisely the missing link in many graduate schools.

Again, if formal education has been primarily focused on maintenance learning and the creation of knowers, then what we have is a perfect system to maintain the status quo. That is, faculty as products of formal educational systems seen themselves as experts with little or no need for ongoing learning. To perceive oneself as a learner involves humility and vulnerability. Regardless of titles and academic accomplishments, the learner knows that there are things he or she does not know. A true scholar will fully engage in discovery, integration, application, and teaching as a learner, with an inquisitive spirit and a commitment to the joint creation of meaning. Such is the attitude of the lifelong learner; the student of life at any age.

Commitment to the joint creation of meaning makes reference to the collaborative quest for relevance. Our multi-cultural, multi-ethnic, and multi-religious world is rapidly shrinking and it brings out the sharp need for awareness of ethical and relational issues, and for skills/aptitudes for communication, conflict management and community action. Through multimedia infrastructures spawned by the ICT revolution, students and educators alike are confronted daily with global issues of poverty and injustice, terrorism, illicit drugs, corruption, pollution and war. (Talisayon, 2001). These issues cannot and should not be ignored but should be taken as the most relevant and urgent learning challenges that we, as a species, have at hand. The problems represent opportunities for critical thinking, creativity, and innovation.

Contemporary business education fails to help business students achieve sufficient educational breadth, particularly with regard to their role and responsibility in an increasingly interconnected planet. “By developing curricular projects linked to community needs, [business] faculty can further their students' technical skills when helping them simultaneously develop greater inter-personal, inter-cultural, and ethical sensitivity” (Zlotkowski, 1996).

Evolutionary learning corporations, as a specific form of evolutionary learning community, have strong and explicit core values that embrace sustainability; recognize the business benefits of sustainability; are committed to organizational learning and to human capital development; understand the evolutionary systems perspective; have an expanded sense of responsibility and

accountability; seek financial robustness; and accept their role as agents of socio-cultural evolution (Natrass & Altomare, 1999, p. 189-191). Business education needs to facilitate the development of the knowledge, skills, values and attitudes that will cover a triple bottom line that creates financial, social and environmental profits at the same time.

The AACSB's report of the Faculty Leadership Task Force points to some symptoms and problems in business education: lack of real world experience of faculty and irrelevance of their research and courses, technological competencies deficiencies, resistance to change. "The primary problem is that faculty skills are not aligned with the rapidly changing needs of business" (in Mowday, 1997, p.4). At the same time, business skills are not aligned with the rapidly changing development needs of society...

The EGADE experience

Inquiry into new educational models for EGADE has been carried out in two academic program areas: the MBA and the Ph.D. in Administration programs. Specific courses in these two programs have been designed to include certain core premises about what we believe are fundamental challenges and responsibilities for business education. The educational model has been labeled "flexible" in order to suggest a range of possibilities in which on-site and on-line interactions couple with self-directed and guided activities to complement and support the learning process (see figure 3).

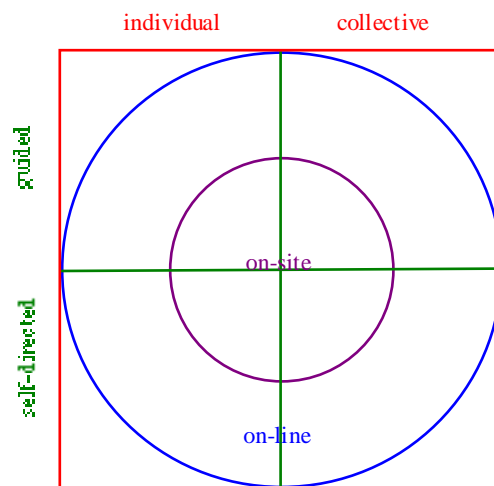


Figure 3. Learning modalities in the flexible educational model

The goal of this flexible model is to provide intense, innovative, and international learning experiences that transform our students into the lead actors of their society's development.

Milbrath (1989, p. 110) suggests that educational institutions need to reorient their efforts toward helping students learn systems thinking, futures design, probabilistic decision making, integrative analysis, creativity, values inquiry, and ethical reasoning. Following a similar perspective, the business education programs of EGADE seek to elicit creative problem solvers, transformative agents, ethical visionaries, self-directed learners, managers of complexity, cross-cultural leaders, and technology shapers. This vision informs the contents and processes of the courses we offer in order to facilitate the development of competencies such as nonlinear systemic thinking, systems design, self-motivation, openness to change and uncertainty, empathy, and innovation. In our courses, we introduce collaborative and self-directed learning methodologies and we encourage the adaptation and application of the knowledge covered in the active organizational contexts of each student.

The faculty committee that has been working on the definition of the flexible educational model has arrived at some initial points of convergence:

- Our programs seek the betterment of society. We want to educate whole persons with a global vision and a commitment to social transformation.
- Our programs seek to be relevant and meaningful. Diverse learning modalities (see figure 3, above) can be integrated into the educational experience depending on needs and circumstances. This diversity is aligned with the overall objective of providing world class graduate business education.
- Our programs seek to promote self-directed and collaborative learning through the creation of learning communities. We want to encourage the construction of knowledge and meaning, and the relation between faculty and students is one of co-learners.
- We want to create the conditions for our students to arrive to levels of understanding that are grounded in knowledge and information. We want them to be capable of making value judgments and embracing systemic perspectives.

- Our programs are based on active participation and dialogue focused on the generation and interpretation of knowledge rather than on the discovery of “objective truths.” The role of the faculty is to create learning environments that are both intellectually stimulating and psychologically healthy for all participants.
- The content of our programs are informed by a social and environmental ethic that seeks sustainability in the business world and beyond. Our students learn to have a long term perspective and to assume the intrinsic responsibility of a leader in their field.
- Our programs are spaces for critical thinking where participants can question and suggest directions for organizations and society. We are interested in connecting the worlds of academia and business not only through particular projects but also through ongoing partnerships and alliances.

So far these premises have been applied in two MBA courses (Strategy Structure, and Processes of Organization and Organizational Learning and Development) and to one Ph.D. course (Philosophy and Methodology of Science). These three courses have been team-taught and students have found value in having two professors sharing different or complementary perspectives in the learning dialogue. The use of a web-based virtual learning platform (e.g., Learning Space, Blackboard, or CommunityZero) has allowed the learning communities to share knowledge and learn together beyond the classroom. The creation of a learning community involves self-discipline and shared responsibility for the attainment of learning objectives. However, after a period of adjustment, students appreciate and welcome the model since they come to recognize how it is aligned with the way global businesses and virtual teams work in the real world.

One of the main shifts that we seek to promote among our co-learners is the conception that learning happens all the time. As one learner put it, “I changed my view on how to learn. From my reading and discussion with other members of the learning community, I am now able to learn how to manage and develop opportunities in my constant changing environment.” Some learners found the model more challenging and enjoyable than “the ‘normal’ teaching style.” In culturally diverse classrooms, participants value the opportunity to listen to and learn from the experiences and perspectives of their co-learners.

Interestingly enough, we found more resistance to the model in the doctoral course. We attribute this to two possible causes: 1) lack of abilities and previous experience in a collaborative educational model, and 2) expectations that, at the doctoral level, studies ought to be essentially individualistic. Our doctoral students suffered a veritable “culture shock” when they encountered professors interested in engaging with them in learning and inquiry. Although they were in their second semester and still taking core courses, they had a hard time self-organizing into a self-directed and collaborative learning community (they reported experiencing interpersonal conflicts and communication problems) because they perceived their interests as too different from each other. At the end of the course, they were able to transcend the initial obstacles and expressed satisfaction with their individual and collective achievements despite the cathartic process it entailed for them.

FURTHER RESEARCH AND CONCLUSIONS

Essentially, our inquiry toward an educational model for graduate business education involves dialogue, reflection, observation, and experimentation. These initial experiences form part of a dynamic learning and research process in which theory and practice intertwine. The particular learning designs that were implemented in the three courses mentioned here represent the interpretations and preferences of the authors. We intend to start gathering new perspectives and experiences from other professors in different courses.

The first and most important part of the development of this educational model is the explicitation of its philosophical, theoretical, and methodological foundations. Another area that will be important to explore in more detail is the particular variations that the model takes on when applied to MBA or Ph.D. courses.

But clearly, the research agenda goes beyond the design of the flexible educational model for our business school. The overall goal of this work is to contribute to the emergence of an authentic global learning society by emphasizing the importance of evolutionary learning and by creating the conditions for the integration of learning strategies in the core processes of business and other sectors of society. As one of our students said: “I know that I will always have the idea of a Learning Community in the back of my mind, and I will try to adapt it to both my personal life as well as my business life.” If a critical mass of students experience the power of learning in a new way and feel empowered to affect change wherever they

work, live, and learn, societal learning and a sustainable economy will fast become realistic possibilities.

This line of inquiry also involves the design and implementation of evolutionary learning communities in arenas beyond academia. In corporations and NGOs, as well as in diverse cultural contexts, it promises to increase the practical knowledge of how to interpret and adapt the vision of a learning-oriented sustainable society to their specific realities.

There is nothing more difficult to carry out nor more doubtful of success, nor more dangerous to handle, than to initiate a new order of things. For the reformer has enemies in all who profit by the old order, and only lukewarm defenders in all those who would profit by the new order. The lukewarmness arises partly from the fear of their adversaries who have law in their favor; and partly from the incredulity of mankind, who do not truly believe in anything new until they have had actual experience of it. (Machiavelli, 1984)

Machiavelli's statement speaks to the perennial difficulty of creating new paths. And yet, could be anything more challenging and rewarding?

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