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**“Constructing Open Learning Communities to Inspire a Changing World”**

## **Towards Open Learning Communities: One Vision Under Construction**

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### **I. THE CHALLENGES OF A CHANGING PARADIGM**

*“As development becomes imperative, as we approach the turn of this century, we are faced with the necessity of giving new meaning to the word. Reflecting on <<development>> is thus the most important intellectual challenge in the coming years.”*

Boutros-Boutros Ghali, Our Creative Diversity, 1995

At the dawn of the 21st century, we find ourselves “living in the midst of one of the most fundamental and certainly the most rapid transformations in history” (Laszlo, 1989, p. 25). The world is changing at a scale and pace (both in terms of speed and degree of turnover) and with a level of interdependency to which we are previously unaccustomed. Derm Barret (quoted in Burnett, 1995, p. 288) describes this phenomenon as ‘hyperchange’ i.e., a combination of linear, exponential, discontinuous and chaotic change. Several forces, including the proliferation of information and communication technologies, the overwhelming glut of (mis)information, the globalization of fragile financial markets coupled with the parallel growth of informal local economies, the decentralization of governments and bureaucracies, the intense marketing of certain cultural fantasies and lifestyle preferences, and the rise of new political actors, are contributing to the intensifying, complexifying and churning of these change processes. The current global environment is filled with a great deal of tension, frustration and conflict that is closely linked both to real and perceived shifts in power, glaring inadequacies and the tenuous nature of ‘modern’ institutions that are continually being revealed, and a nagging uncomfortability which is tied to the inherent unpredictability and uncontrollability associated with hyperchange. The vision of a rational and functional world order so eloquently articulated by the architects of the 20th century i.e., scientists, economists,

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1. The views presented in this paper are solely those of the author and do not necessarily represent the views of the United Nations Educational, Scientific and Cultural Organization or of the Learning Without Frontiers Coordination Unit. To obtain further information on *Learning Without Frontiers*, the programme director, Dr. Jan Visser, can be contacted by phone (33-1) 456-80887, or fax (33-1) 456-80828, or via e-mail to J.VISSER@UNESCO.ORG. Details on *Learning Without Frontiers* can also be found on the World Wide Web at <http://www.education.unesco.org/educprog/lwf/index.html>

and WWII statesmen, is becoming increasingly questioned in terms of both its achievability and desirability for the next millenium.

Over the past three hundred years, the paradigm of modernity<sup>2</sup> has played a significant role in shaping dominant notions of development, progress, growth, freedom, democracy, and social justice. However, several sacred intellectual spaces that have been closely linked to modernity are currently being contested and renegotiated on various terrains and at various levels of our day-to-day lives. These challenged spaces include: the mechanistic/ reductionist view of the world vs. complexity, the objective vs. the subjective, the modern vs. the traditional, the universal vs. the culturally specific and pluralistic, the public vs. the private, the real vs. the virtual, the secular vs. the religious, the urban vs. the rural, the individual vs. the community, the male vs. female vs. gender, and the nation-state vs. the supra-national vs. local. Such contestations, on one hand, provide several reasons for optimism by opening up opportunities for shifting power and resources, generating new discourses and language, remapping borders, creating new identities, and liberating relationships (Giroux, 1992). They also at the same, however, place tremendous pressure on the paradigm of modernity which can be expected to result in a multitude of skirmishes, shocks, dislocations, breaks, and ruptures as we try to come to grips with what is an inherently messy world. The levels of violence and destruction underlying these paradigmic adjustments will no doubt be influenced by the global threats of militarization (further enhanced through the increasing decentralization and commercialization of weapons), environmental degradation, and socio-psychological alienation. What should be viewed as particularly worrisome is that the phenomenon of hyperchange places a severe strain on our present abilities to make sense of, contextualize, adapt to, negotiate, and influence the opportunities and conflicts taking place around us.

These issues are invoked not in the interests of alarmism but rather to raise some pressing questions:

- Will we as individuals and as communities be able to deal with these emerging and never-ending range of conflicts in socially constructive ways?
- Will we be able to understand and reframe the nature of our problems; to recognize and seize new opportunities; to put into practice what we already know from thousands of years of research and experience; and to create new solutions that will benefit all of humanity, not simply elite segments of it?
- Will we be able to create new and transform our existing systems, institutions, relationships and processes to allow them not only to tolerate a plurality of voices and opinions on development, but also to nourish the continuing growth and diversity of such visions?

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2. In this discussion, modernity refers to the loosely defined complex framework of complementing and contradicting relationships that emerge from the intersections between the various ideologies and counter-ideologies derived from and, in reaction to, the Judeo-Christian tradition, the tradition of Western patriarchy, the Enlightenment and Western science/rationality, the Industrial Revolution and capitalism, colonialism and the processes of "modernization", and the Cold War. This paradigm has served to influence the vision, attitudes, priorities, values, social relationships, rituals and practices, resource allocations, and institutional modalities of a large part of the world. The world has also been analyzed and critiqued through the imposed lenses of modernity.

- Will we, young and old together, be able to overcome the various feelings of selfishness, powerlessness, fear, indifference, rigidity, and cynicism that consume us at various times, and engage in the types of reflection/action necessary to inspire a hyperchanging world?

### **LEARNING IN ORDER TO CONFRONT A CRISIS OF MEANING**

The answers to these questions will largely depend on how we deal with a deeper crisis of meaning that confronts us today. Korten (1996) highlights the crux of the problem, “The basic outlines of what we must do to avoid self-destruction as a species have long seemed clear to many of us. Yet, I came to sense that if survival holds no larger meaning for us, avoiding extinction is not enough to draw us to the difficult changes we must make. To make a choice for life, we must be drawn by a compelling vision of new possibilities grounded in a sense of meaning.” The ‘narratives’<sup>3</sup> of the past have either collapsed, been deconstructed, rejected, or have fallen into self-preserving isolationist modes. Many societies lack both relevant shared narratives and a respect for and understanding of other peoples’ narratives. Many individuals and communities around the world today lack the ability to generate, link (the past, present and future), and evolve multiply interconnected personal narratives which provide them with a sense of meaning beyond themselves. The ability to generate new meanings in socially constructive, pluralistic and non-violent ways can be seen to be constrained, to a large degree, by a breakdown of several social self-referencing mechanisms and feedback processes.

First, we are confronted with a seemingly paralyzing inability to introduce, interact around and utilize new ideas.<sup>4</sup> Anti-intellectual approaches masked under the rhetoric for ‘pragmatism’, ‘practicality’, ‘implementation’, and under false dichotomies of academic vs. practitioner and theory vs. action, are dramatically reducing the spaces for engaging in more critical, constructive and participatory forms of intellectual discourse which are essential for reflecting upon and challenging the ideological basis of how societies are being forced to conceive of their development. The results are that we are unable to generate new visions to give context to our ideas and new ideas to give greater context to our visions. In addition, dominant analytical frameworks, methodologies, discourse, and interactions are not robust and dynamic enough to help us understand and respond in creative and diverse ways to the complex challenges that face the world. Senge (1990, p.69) describes: “We are increasingly confronted with problems that have no simple cause.” Yet, we continue to attempt to construct mechanistic, first-order, single-discipline solutions to address these. Furthermore, most ‘educated’ people have been socialized to only see narrow immediate realities and isolated contexts which tend to be mired in the logic of functionalism, economic efficiency, cost-

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3. Postman (1995, p. 5) describes a narrative as “a story that tells of origins and envisions a future, a story that constructs idealism, prescribes rules of conduct, provides a source of authority, and, above all, gives a sense of continuity and purpose.”

4. Papert (1993, p.41) describes Piaget’s notion that all mental operation has two facets, namely, *assimilation* (changing your representation of the world to fit your ways of thinking) and *accommodation* (accommodating your ways of thinking to fit the world). Most institutions today conservatively operate under the assimilationist mode of not allowing themselves to change under the influence of new ideas, but rather, they see and interpret new ideas through the mental lenses of their traditional own ways of thinking and doing. Such processes serve to distort and undermine the power of new ideas.

effectiveness, and risk averseness. Their ideas and positions are reduced to specific places, fixed periods of times, and rigid definitions of identity and social roles such as low caste, women, minority, left/right, etc.

Second, we are also faced with a breakdown in our ‘institutions of reflection’ i.e., the multiple socio-spiritual spaces in which we engage in ethical self-reflection, sense-making, and dialogue about our attitudes and priorities and their links to our behavior and actions. Such institutions are critical to enhancing our awareness and consciousness, to continuously rejuvenating our optimism and hope, and to supporting our engagement in a process of radical transformation. However, having been simultaneously attacked by both the nihilistic forces of liberalism/post-modernism and preserved/hand-cuffed by the forces of conservatism (Wallis, 1996), these spaces are either disappearing or becoming antiquated and irrelevant. Many of our surviving and emerging institutions prevent us from having the time to think about the different changes taking place around us and our relationship to these. They also allow for dangerous levels of anonymity for the participants which has serious consequences for notions of social responsibility.

Lastly, we are faced with a crisis of leadership. Conventional notions of leadership have typically been framed in terms of those people who are in the elite ranks of governments, business, other organizations, rather than, in terms of all of us being leaders in different facets of our lives. This has created a situation in which individuals are easily allowed to defer their personal responsibility for actions to the ‘other.’ Many practiced models of leadership are still grounded in notions of authoritarianism and hoarding of power with the guiding metaphors of self-preservation and manipulation. Many of our leaders have tended to adopt and hide behind positions based on the *real-politik*, partisanism and cynicism, and lack the courage and confidence to take bold risks in new directions. Preferring to preach dogma, they lack the ability to inspire others to create meaning in their lives.

The crisis of meaning can be seen as being linked to the failures of modern education systems, and, more broadly, to limitations and biases of the dominant paradigm of development. Our responses to this complex crisis have thus far disappointingly consisted of models that assume simplistic linear causalities which, on one level, have led to calls for more schools, formalized non-formal centers, and distance education modalities; and, on another level, have invoked and glorified a fool’s paradise based on ever-increasing levels of economic growth/consumption and technological innovation. These responses, for the most part, have lacked a deeper understanding of and commitment to supporting the processes of change that are required to radically transform systems. They have been narrowly framed in terms of advancing the agenda of the economic and material rather than in terms of a more profound struggle to discover what it means to be ‘fully human.’ The dialectical lifelong processes of discovery and self-realization, both on individual and collective levels, should serve to guide a much broader philosophy of learning which extends far beyond the conventional classroom and one-dimensional standardized tests. Senge (1990, p. 14) further elaborates, “Real learning gets to the heart of what it means to be human. Through learning we re-create ourselves. Through learning we become able to do something we were never able to do. Through learning, we re-perceive the world and our relationship to it. Through learning we extend our capacity to create, to be part of the generative process of life.” However, much of what we do today in education and development actually contradicts what we know about this broader

understanding of learning. Many of our existing methodologies and approaches, for example, suppress or teach us to ignore our ‘meaning needs’ (Boulton, 1992, p.3). i.e., the impulses that stimulate in us desires to create meaning. The suppression of these meaning needs prevents us from moving from modes of *unconscious adaptation* to *conscious anticipation* (Botkin et al., 1979) and from engaging in authentic fully humanizing development.

This paper is thus about broadening our conceptions about learning as a process of interacting, understanding, growing together; of rebuilding and reconceptualizing hope and trust; and of coping with, experimenting and contributing to meaningful change. It asks the reader to step outside of the internal logic of the school and of the nation-state -- to move away from development goals geared towards human and knowledge capital; from objectives of access, equity, quality, and efficiency; from ministries of education, teachers, classrooms, and textbooks -- and, to engage in alternative ways of seeing and thinking about the world of learning. At the same time, this paper is about development. It seeks to fundamentally question 19th and 20th century definitions of development, and the persistent use of antiquated, paternalistic and oftentimes dehumanizing frameworks, terminology and approaches. It attempts to raise questions around how we see ourselves and frame our priorities, roles, relationships, institutions, and environment. More importantly, it strives to move beyond the project of deconstructing towards the project of constructing new paradigms of development. To this end, it presents the concept of open learning communities which situates learning within the larger context of new ways of thinking about development -- as an ongoing interactive and mutually enhancing process of questioning, discovering, reflecting, sharing, and inventing what it means to be human, both individually and collectively.

This paper is intended to spark debate, reflection and creative action rather than to provide any fixed, pre-fabricated solutions or answers.<sup>5</sup> It is by no means complete and should be seen as a vision under construction. Section II of the paper discusses the increasing inadequacy and inappropriateness of our current menu of educational solutions in relation to the urgent need to create different levels of meaning. Section III describes some elements of a framework for thinking about open learning communities. Section IV argues that the process of constructing open learning communities is equally important as the content and framework. Section V concludes with some discussion of strategies for engaging in changing the world of learning and reflects on the initial experiences of Learning Without Frontiers. It is the author’s sincere hope that those who read this paper will be inspired to begin the process of constructing their own visions of open learning communities.

## **II. THE INCREASING INADEQUACY AND INAPPROPRIATENESS OF ‘YESTERDAY’S SOLUTIONS’<sup>6</sup>**

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5. The author is very conscious of the tension between sharing a vision and imposing one. There is, of course, no easy way to go about mediating this tension as the very act of calling for change represents an imposition of sorts. This is a process that must therefore continually be checked and regulated with ample amounts of responsibility, flexibility and humility, and with strong efforts to encourage participation and the creation of alternative viewpoints.

6. “Today’s problems come from yesterday’s solutions” (Senge, 1990, p. 58).

*“We try to solve all our problems by assigning them to educators [and schools] -- not only knowledge, but citizenship, moral rectitude, comfortable social relations, a more able work force, and so on.”*

David Perkins, Smart Schools, 1992

The responses to the crisis of meaning by the international development community<sup>7</sup> have thus far centered around schooling with increasing calls for more ‘basic education,’ ‘functional literacy,’ and ‘skills training’ opportunities. This section seeks to raise critical questions about the international development community’s insistence on using schooling as its main reference point for supporting individual and organizational learning. It argues that much of what we assume and do today in the field of education contradicts a larger heterogeneous vision of people-led development. In addition, this section argues that research from diverse fields such as cognitive sciences, applied linguistics, psychology, neurological sciences, ecological sciences, biological sciences, social anthropology and semiotics, indicates that the way schools are presently configured goes against much of what we know about learning -- about the diversity and complexity of learners, learning styles and learning processes, learning relationships, learning cultures, and spaces where and conditions under which learning takes place. Our current educational solutions, still grounded in the metaphors of yesterday, continue to view learning as a mere preparation *for* life – with a discrete beginning and end -- not as an integral part *of* life. Such a recognition demands that the international development community’s vision be expanded beyond merely trying to do more of the same. Tinkering<sup>8</sup> with the existing system is no longer a good enough option.

It should be clarified that the author recognizes the tremendous value and need for organized learning spaces where adults and children can come together but argues that such spaces need to be radically different in terms of their ideological and philosophical goals and assumptions, structures and mechanisms, processes and practice. Some learning spaces have managed to undertake this process of transformation, however, constituted as such, it would be both imprecise and inappropriate to use the same term i.e., ‘schooling’, to describe the experiences linked to these new spaces. Several generalizations can be made concerning how the institution of schooling has been developed and, in many cases, continues to be reproduced around the world:

a) Schools have been shaped by ideological and philosophical traditions of development which are increasingly being challenged. The inter-connected logics of colonialism (civil servants, conversion and racial superiority), industrialization and human capital theory (workers, managers and jobs), modernization (modern/Western outlooks, in direct opposition to

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7. The term is used to refer to the wider grouping comprised of representatives from governments, international agencies, foundations, NGOs, universities, etc.

8. In calling for a new mindset about educational change, Fullan (1993) describes tinkering as ‘a clumsy attempt to mend something.’

traditional), nation-building (national identity and allegiance to the state) and globalization (consumerism and competition) have played significant roles, at different points in history, in shaping the values, goals, structure, timing, processes, and activities of schools. Schooling is predominantly driven by the development imperatives of the state. Thus, the rationale guiding schools has been strongly biased towards supporting the urbanized formal sectors of government and large scale industry. Schooling has served to 'mainstream' and socialize people into fitting into the dominant culture with the focus on maintenance learning. "The acquisition of fixed outlooks, methods and rules for dealing with known and recurring situations. It enhances our problem-solving ability for problems that are given. It is the type of learning designed to maintain an existing system or an established way of life" (Botkin et al.1979, p. 10). There is virtually no ideological space provided for challenging existing knowledge frameworks and constructing alternative ways of seeing, believing, and doing.

b) "Three mechanistic metaphors have historically contextualized our view of schooling and learning: the universe as a clock, the brain as a computer, and learning as tabula rasa (blank slate)" (Marshall, 1996, p. 179). Assumptions derived from these metaphors, and further elaborated through theories of Skinnerian behavioralism, Piagetian developmental psychology and Darwinistic individualism, still underlie dominant structure and practice in conventional education systems. Schools and the processes of teaching and learning are predicated on the institutional desire to instill control and discipline. The effect, as Papert (1993, p. 55) describes, is that "the institution of School, with its daily lesson plans, fixed curriculum, standardized tests, and other such paraphernalia, tends constantly to reduce learning to a series of technical acts and the teacher to the role of a technician." In the framework of this highly formalized and mechanical environment, Schank (1995) argues that the very nature of schooling opposes natural learning.

c) Education systems have tended to be conceived of as rigid and isolated entities. Schools have been developed as compartmentalized, closed systems that are delinked from their external communities. Learning in schools is seen as separate from and unconnected to the learning that takes place in non-formal and informal environments. Most schools have refused to acknowledge that learners spend more time in the informal environment than they do in schools. The validity of other spaces for learning, other knowledge systems, and other partners in the learning/teaching process has often been neglected, and even, devalued. Furthermore, there has been very little flexibility within the system. It has been organized along strict linear levels of education i.e, the 'stages' approach, with artificial separations such as primary, secondary and tertiary. Schooling takes place within inflexible blocks of time which require learners to be present on a year-long basis.

d) Parents and students' objectives for engaging in schooling have been narrowly centered around obtaining a job with the primary focus on doing well on the examination and obtaining a certificate. In this setting, there has been little value attributed to learning as an essential process in the wider context of life. Schooling has been conceived of as taking place only in the early years in one's life, and learning is thought to be completed when one graduates and receives a diploma i.e., signifying that one is 'educated.' Furthermore, the exam-orientation has tended to lead towards approaches tied to memorizing a large repertoire of facts and routines with little concern over whether the learner actually understands and can apply different information and skills in constructive ways. Learning has become a ritual. Schools

have, for the most part, failed to establish a culture of learning that extends beyond the walls of the classroom.

e) Schooling has been primarily framed in terms of knowledge and value transmission. Gardner (1993) describes that, “In the outmoded view of learning that dominates our institutions, knowledge is regarded as an objective substance that can be deposited directly into people’s minds. Education is seen as the process by which knowledge is transferred into the learner’s minds, and teaching is seen as the packaging of knowledge for efficient transfer.” The focus has been on teaching rather than supporting learning and understanding. Learners have been regarded as ‘empty vessels’ and the range of knowledge and cultural experiences that they already come to school with is hardly acknowledged.

f) There is very little sensitivity to the diversity of learners. The system has been constructed along the lines of factory in the tradition of Fordism (a term coined to describe the industrial mass production process of automobiles developed by Henry Ford). Within this framework, learning interventions have been typically designed for the imaginary “mean” learner. There is very little flexibility for catering to the specific differences of learners -- their individual personalities, culture, linguistic, learning styles, family background, motivational levels, interests and special needs. Furthermore, the system fails to take into account the physical, emotional, social and cognitive abilities of each learner. However, Gardner (1991) describes, “What science about learning tells us is that human abilities are diverse in their form range and development and are intensely individual--they do not match the mass production standards of schooling.”

g) In addition, many educators mistakenly believe that intelligence is a static, unmodifiable trait, and that potential and capability are finite (Dickinson, 1994; Marshall, 1996). “The IQ way of thinking says that people are either smart or not, are born that way, that there’s nothing you can do about it, and that tests can tell you if you are one of the smart ones or not” (Goleman, 1995, p. 38). Under this scenario, the ‘smart’ students enter into a virtuous cycle of praise, support and achievement, while those deemed as ‘dumb’ enter into a vicious cycle of self-doubt, neglect and failure. Closely linked to this notion, is a general fallacy that success in learning depends more on pure ability than on effort (Perkins, 1992, p. 35).

h) Curricula have been framed in tightly compartmentalized and fragmented disciplines, with content and materials that tends to be irrelevant to most learners, often favoring a strong urban and middle-class bias. Gardner (1991, p.12) adds that, “Indeed, as currently constituted, our educational system is heavily biased towards linguistic modes of instruction and assessment and, to a somewhat lesser degree, towards logical quantitative modes as well.” Several critiques have also been raised about the propensity of schooling to alienate individuals from their rural, ethnic and linguistic communities. The focus of curricula has been on developing abstract, academic, and generalized learning, with little attention to contextualized, reflective, emotional learning (Resnik, 1987; Perkins, 1996; Goleman, 1995).<sup>9</sup> Curricula have been conceptualized with the understanding that learning takes place in chunked, linear stages

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9. Goleman (1995, p. 36) further discusses that, “Academic intelligence offers virtually no preparation for the turmoil -- and opportunity -- life’s vicissitudes brings.”

starting with notions like ‘functional literacy’ and ‘basic education’ constituting the first stage with later stages focusing on higher order levels of thinking. Lauren Resnick (quoted in Perkins, 1992, p. 30) refutes this conceptualization, arguing that so-called “higher order thinking isn’t higher order. Higher order thinking refers to reasoning, arguments, problem-solving, and so on. Thinking should not be seen as some esoteric add-on. The most basic and seemingly elementary performances require active strategic thinking.”

i) Learning in the classroom has been seen as a predominantly individualistic activity (Resnick, 1987; Abbott, 1995). Competition has been viewed as a far more powerful motivator than cooperation (Marshall, 1996). Sharing with, assisting and collaborating with fellow learners on projects is typically called ‘cheating’ and is punished. Fear and mistrust (of students and teachers) have shaped most schooling models. To support this, there is a strong hierarchy built into the school (Papert, 1993).<sup>10</sup> The learner is seen to be subordinate to the teacher, who is viewed as the omnipotent expert, with classroom roles largely fixed. In turn, the teacher is subordinate to the principal and inspectors. The learner, the teacher, and communities have very little opportunity to participate in the identification of learning goals and the development of curriculum. The processes by which learners learn from other learners, their parents and communities, and in other environments are also not encouraged. Furthermore, by isolating learners into age groups, schooling has not fostered activities that would involve both adults and children learning together and geared towards building greater understanding between them.<sup>11</sup>

j. The liberal democratic tradition has argued that ‘schooling for all’ serves as a mechanism for the creation of a democratic and egalitarian society. Schooling is supposed to be a great equalizing and empowering force. However, schooling and its claims towards producing meritocracy has been strongly critiqued on the grounds that it reproduces hierarchical socio-economic relations and reinforces existing notions around the distribution of power (Bowles and Gintis, 1976). Many countries today, for example, still have education systems that feature different socio-economically biased tracks of learning, such as academic and vocational/technical, which tend to lead to different predetermined roles, opportunities and power in society. Illich (1972) has also described the feelings of ‘psychological impotence’ i.e., the inability of people to fend for themselves, that are cultivated in students in relation to the dominant socio-economic institutions. Those who drop-out or are forced out of the system are labeled failures and leave feeling humiliated, bitter, frustrated, and demoralized. Naik (1975, p.171) has analyzed this process at work in India which is equally applicable to many countries

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10. Papert (1993, p. 61) argues that “the question has moved from how power is distributed within the educational hierarchy to whether hierarchy is an appropriate mode of organization for education.”

11. Abbott (1995) brings attention to a study into what would most inspire the quality of learning in young people that was undertaken in the United Kingdom during the late 1980's with groups of 17 year olds. The study came up with the surprising conclusion that "what we need most is more contact with adults other than parents and teachers. We know what our parents think - we have heard this many times. We are suspicious of teachers; you are paid to say what you do! But what do real adults think, after all it is into their ‘Club’ that we are supposed to be moving, yet we have very little idea of what matters to them, and where we might fit".

of the South, “The main achievement of the system, therefore, is to condemn the bulk of children of common people as dropouts and failures and to consign them to a life of drudgery and poverty which has hardly any parallel in the contemporary world or even in our own earlier history.” Worse yet, these human beings leave the system believing that their failure is solely their fault.

These critiques are by no means exhaustive and serve to highlight only certain concerns about the limitations of schooling. The extent to which this alphabet of generalizations applies to any particular context can, of course, be extensively debated. Positive examples can be found in the education system, but these occur in spite of the system rather than because of it. What should emerge from this discussion is that most educational systems today still remain insensitive to the widely diverse needs of learners of all age groups and ignorant to the complexity of learning processes. Furthermore, the institutionalized intervention of schooling has provided little space and empowerment for both individual learners and learner groups to engage in the construction of alternative visions of development. Marshall (1996, p. 183) describes that, “By design, we constructed and operated our Newtonian schools as we understood this world, and this produced iatrogenic and learning-disabled institutions that have suppressed reflective thought, creativity, and the innate and inexhaustible human capacity for lifelong growth.” Such critique extends far beyond the school as being elitist, classist, racist or sexist. It raises fundamental questions around the institution of schooling as being a dehumanizing and socially destructive force in society.

What must be viewed as particularly disturbing, however, as we look towards the future, is our continued obsession with the institution of ‘schooling’ as the central reference point for learning; the increasing demands we place on it as a panacea for solving society’s problems; and our inability to ‘see’ and stimulate other dynamic learning spaces. For example, many current efforts by the international development community as part of the Education for All movement are primarily geared towards extending the system “to the unreached”<sup>12</sup> by expanding existing delivery mechanisms and improving the management and financing of these. Distance education, commonly defined as an educational process in which a significant proportion of the teaching is conducted by someone removed in space and time from the learner (Perraton, 1986), is gaining immense popularity among these modalities. While distance education serves to provide an added element of flexibility, most efforts (as they are predominantly motivated by cost considerations) do not address the deeper problems that confront education systems as they have tended to be conceived of as extensions of the school. Such activities fail to confront the ideological contradictions and systemic conservativeness of schooling. Formal schooling, whether in person or at a distance, is an inappropriate solution by itself for dealing with the development challenges and opportunities of the future. Fullan (1993), after extensive review of change initiatives, argues that introducing new innovations and reforms into current educational systems is “an ultimately fruitless uphill battle” as these

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12. The term ‘unreached’ is grounded in a deficit notion of development and is typically used to refer to those segments of the population that have not been touched with some form of government-acknowledged modern education, formal or non-formal. Under its conventional definition, it has little to do with learning and understanding, and fails to validate the rich learning experiences that take place in every community. The term is typically used in slogans such as ‘reaching the unreached.’

systems have been designed to be resistant to change. He calls for “a new mindset about educational change.”

### III. OPEN LEARNING COMMUNITIES: THE GENERATIVE CONVERGENCE OF HERETICAL VECTORS

*“And the cultural question therefore is this: is there another solution, a solution of our own? Don’t we possess the tradition, the imagination, intellectual and organizational reserves to elaborate our own models of development, consonant with the truth of what we have been, what we are, and what we want to be?”*

Carlos Fuentes, *Our Creative Diversity*, 1995

Within the context of a crisis of meaning and the limitations of yesterday’s solutions, there is a need to dramatically redefine how we look at education. On one level, this starts with seeing the goals of education as more than knowledge transmission, control, discipline, test scores, diplomas and jobs. On another level, it requires raising core questions about the current conceptualization of “development.”

Thinking and acting in terms of open learning communities signifies a concerted effort to resituate our means and ends in both education and in development -- from a model of learning *for* development to learning *is* development. It represents an attempt to put into use and practice much of what we already know.<sup>13</sup> The term ‘open learning communities’ is presented here in order to deliberately challenge the reader to think of learning beyond the conventional school-teacher-textbook modalities -- to facilitate a shift from a culture of schooling to a culture of learning. The term should be seen as a symbolic descriptor representing the dynamic convergence of several ideological vectors (comprised of theories, movements, mini-revolutions, acts of resistance, and feelings of hope that are carriers of change) from around the world. What this convergence provides is a set of principles, experiences and commitments that not only serve to challenge some of the basic assumptions and goals around how education systems have been conceptualized and implemented in the modern world, but also start to form a legitimized space for constructing new alternatives. The convergence brings a generative dimension to it whereby the effect of each ideological vector is increased by its simultaneous contribution to increasing the power of other vectors.

The concept of open learning communities is motivated by three sets of inter-connected goals:

- To assist individuals in engaging in diverse processes and contexts which allow them to develop their full human potential -- as individual persons, as family members, as

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13. Perkins (1992, p.3) emphatically states that, “We are not putting to work what we know. We do not have a knowledge gap -- we have a monumental use-of-knowledge gap.”

member of different communities, as part of humanity as well as at a spiritual level. This requires us to recognize the diversity of both individuals and communities, their particular needs and aspirations, and the different roles and capacities which people are required to play in diverse cultural settings. It also requires us to recognize that learning also takes place at an organizational level.

- To assist each individual and community in participating in meaningful ways to the decisionmaking and management functions of society. This implies that people must be empowered to access various participation opportunities as well as to contribute to the creation of new participation opportunities.<sup>14</sup> They must continually learn to play new roles in different settings. They must be empowered to read the world with various relational lenses.

- To assist individuals and communities in engaging in the processes of creatively, responsibly and non-violently constructing alternative paradigms for development that are consistent with the ideals of mutual respect, compassion, trust, fairness and sacrifice. Such alternative paradigms should envision the renewal of human relationships and the rebuilding of families and communities, the transformation of institutions, the fundamental redistribution of resources and reconceptualization of power along more equitable and sustainable (grounded in conservation) lines, and the creation of respect for all forms of life and our natural environment.

It is important to note at the outset that there is no such thing as a simple, replicable “open learning community” that provides all things to all learners (although this may appear to be an obvious statement, it actually represents quite a profound shift from the way in which we have attempted to develop education systems -- as one-stop shopping -- over the past 50 years). Rather, there should exist a multiplicity of diverse, layered, interconnected open learning communities. Each particular open learning community can be seen to evolve out of specific cultural and historical processes, out of a response to a specific set of local/global problems, and out of dynamic interactions with its environment, other open learning communities and the contributions of the individuals who choose to participate in it. While there is no one pre-defined or pre-fabricated model of an open learning community, we can, however, begin to articulate some principles (that are not fixed, but evolving) which contribute to envisioning open learning communities. To better explain the concept, the phrase will first be taken apart in order to lay out some of the key dimensions and implications of the terms “open”, “learning”, and “community.” Although this approach may appear to be a bit artificial or fragmentary, transforming the world of learning requires us to question and rethink the basic underpinnings of how we see the world in terms of problems and opportunities, how we engage in processes of learning, and how we interact with each other. The phrase will then be re-assembled and discussed as a dynamic whole. As has been indicated, the vision of open learning communities is continually growing and evolving. The following exercise should

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14. Levinger (1996a) has coined the term ‘Active Participation Capacity.’ APC is defined as an individual’s propensity and ability to interact with and take optimal advantage of the full complement of participation opportunities offered within a given environment.

therefore be viewed as an initial attempt to illustrate some key ideological vectors that are driving the notion of open learning communities rather than provide a precise comprehensive definition (which ultimately might prove to be counter-productive and restrictive). Others, of course, will have differing interpretations about the concept of open learning communities. It is therefore important that we encourage such differences while at the same time, engaging in processes of dialogue centered around further elaborating, clarifying, sharing and reconfiguring certain understandings and frames of reference.

### **PERSPECTIVES ON “OPEN”**

Some key vectors: systems thinking, complexity, fuzzy thinking, holistic frameworks, fluidity, deep ecology, non-linearity, polychronic thinking.

The use of the term ‘open’ is strongly linked to processes of opening up the ways in which we see and understand the world. Capra (1996, p.3) describes that “the more we study the major problems of our time, the more we come to realize that they cannot be understood in isolation.” The concept of open is thus grounded in systems thinking -- a discipline for seeing wholes (Senge, 1990). Frameworks and approaches linked to the term open seek to liberate us from mechanistic approaches, reductionist thinking, rigid hierarchical structures, linear processes, isolated modalities, and bivalent thinking (i.e., two-valuedness, two ways to answer each question, true or false, 1 or 0). Several dimensions of the term ‘open’ merit further elaboration:

- Open can be used to describe dynamic systems and the interplay between them. All things that evolve in the real world, be they physical, chemical, biological, ecological, or even social systems, are dynamic open entities that continually interchange energy, matter and information with their environment to stay alive (Laszlo, 1992; Capra, 1996). The boundaries are seen as semi-permeable rather than absolute. Flows occur horizontally among units as well as vertically between different layers. Open systems are thus vulnerable to change within their own structures and also have the potential to change other systems.
  
- Open thinking involves being able to see underlying structures and inter-relationships rather than linear cause-effect chains (Senge, 1990). It is closely linked to the notion of deep ecology which “sees the world not as a collection of isolated objects, but as a network of phenomena that are fundamentally interconnected and interdependent. Deep ecology (as distinguished from shallow ecology which is anthropocentric) recognizes the intrinsic value of all living beings and views humans as just one particular strand in the web of life” (Capra, 1996, p. 7). Within this context, there is a change in emphasis from viewing entities and organizational relationships in terms of hierarchical modes towards promoting more heterarchical linkages, i.e., systems in which each element is equally ruled by others (Papert, 1993).
  
- Open thinking involves the ability to shift analyses and reference points back and forth between different levels of systems (non-hierarchical systems nested within other systems) and across systems (Capra, 1996, 37). It involves being able to move between different contexts and across different disciplines of knowledge. It also entails being able to connect different contexts and disciplines into more holistic frameworks.

- Open thinking involves seeing change in terms of processes rather than as isolated snapshots. Such processes often take place in dynamic non-linear and unpredictable ways. This implies that we be willing to view conceptions of time differently. Time is conventionally perceived as being monochromatic in which events and acts follow in a certain definite sequence. Polychronic conceptions of time are used to describe different phenomena occurring simultaneously (Herman, 1989). Time is not understood in a linear way but rather as a set of certain points of mutual reference. Herman (1989, p.8) describes that, "Polychronic notions of time to a much larger degree admit the possibility of jump (qualitative) changes."

- Open thinking involves fuzziness -- seeing the world in infinite shades of gray between black and white, not only in black in white terms. The fuzzy principle states that everything is a matter of degree. Fuzziness means multivalence i.e., three or more options, perhaps an infinite spectrum of options, instead of just two extremes. It is about living with contradictions: moving from a world of 'A *OR* not-A' to considering that 'A *AND* not-A' can both exist (Kosko, 1993).

The above mentioned points have many implications for how we currently see the world of learning. For example, they suggest that the artificial divisions of formal, non-formal and informal education have little relevance as categories in isolation of each other. It calls for us to recognize that we all live in "mediatized environments where education is simply one of many different cultural experiences" (Burnett, 1996). It asks that we think in multichannel terms -- designing approaches based on our understanding of the multiple channels that support different types learning processes and that learners engage in within a particular environment (such as schools, family, high tech and low tech media, religion, nature). This also involves discovering new ways to link these individual channels together. Within this context, it is important to understand how information flows between channels and environments and seek to stimulate different flows of information. Open thinking also questions the value of using nation-states and geo-political borders as the primary unit of analyses for discussing learning systems. It pushes us to see institutions and policies in terms of horizontally and vertically overlapping layers ranging from the local to global. In addition, the idea of open calls for the introduction of more flexibility by moving away from constrictive and debilitating linear levels/grades, divisions of education (such as primary, secondary and tertiary), and rigid time frames.

The notion of open questions the value of using bivalent categories to describe complex realities such as: educated and uneducated, literate and illiterate, enrolled and unenrolled, developed and developing, rich and poor, modern and traditional, and so on. It pushes us to think beyond using isolated categories of race, class, gender. It strongly challenges the use of development strategies that target specific groups in isolation of each other such as out-of school and unemployed youth, drop-outs, street children, marginalized women, the poorest of the poor, unreached, etc. Escobar (1992, p. 140) problematizes the use of single labels to describe human beings and social relationships, "The use of labels such as 'small farmer' or 'pregnant women' reduces a person's life to a single trait and makes him/her a case to be treated or transformed. The use of labels also allows experts and elites to delink explanations of 'the problem' from themselves as the non-poor, and assign them purely to factors internal

to the poor.” Open also encourages us to think more holistically and moves away from highly compartmentalized and isolated disciplinary approaches towards more integrated frameworks. It encourages the building of linkages across sectors, for example, between learning, health, culture, politics and economics. It also requires that we acknowledge the validity of other knowledge systems. There is a heterarchical space for a plurality of voices. Finally, the idea of open challenges us to look at our work in development and education in terms of dynamic, continuous processes rather than as discrete projects which will result in easily definable end-products. The international development community must come to recognize that the future can neither be predicted nor manufactured.

### **PERSPECTIVES ON “LEARNING”**

Some key vectors: lifelong learning, mind/brain research, multiple intelligences, emotional intelligence, constructivism, metacognition, active learning capacity, collaborative learning, inter-generational learning, multicultural learning, innovative learning, radical pedagogy, multichannel learning, interactivity.

The notion of ‘learning’ is a very broad and multi-dimensional one. Learning has implications for how people search for, acquire, analyze, synthesize, use and share information and skills from a variety of media; how they perceive themselves, reflect on their condition and negotiate their identities; how they connect with others and their environments; how they seek to express themselves, grow, and develop their own capacities to continue to learn; and how they construct meaning and evolve their consciousness. Because of its inherent “ephemeralness and unpredictability” (Burnett, 1996) and the diversity of contexts in and purposes for which it takes place, learning is extremely difficult to describe. Rather than attempt to provide an extensive overview of learning, this part will merely serve to highlight a few aspects of learning that are particularly relevant to the concept of open learning communities.

#### **Learning for What?**

There is a wide range of goals that exist for learning which are culturally, systemically and learner defined. A few goals which incorporate both individual and societal dimensions for why we learn are discussed. We learn both for survival and in order to give greater meaning to our lives. The Delors Commission (1996) suggests the following broad set of goals: Learning to Know, Learning to Do, Learning to Live Together, Learning to Be. Imbedded in these is a long-term dimension of learning as well as a perspective that cuts across all domains of life i.e., the goals of learning are not limited to only succeeding in the economic or formal sectors. These goals are also not seen as static and are given meaning through the interpretations of different communities and individuals which allows them to go beyond being words on a piece of paper. Within this context, there is an understanding that spaces must be provided for interacting around the goals of learning in a pluralistic and participatory manner, in which there is strong respect and value given to different belief systems, knowledge systems, cultural values, and languages. We can also see the goals of learning in terms of processes which provide for the varying cognitive, emotional, psycho-social, health and nutritional, moral/ethical, cultural/artistic, technological, participation, ecological and spiritual needs of individuals and communities.

Within the framework of open learning communities, there is a conscious attempt to link understandings and lessons from the past and the present towards actively constructing the

future. This implies creating contexts in which we are expected to make mistakes and in which we are encouraged to learn from our mistakes. This also involves a shift in emphasis from status quo-based approaches which have supported maintenance learning. Rather, there should be a concerted effort to promote innovative learning which prepares individuals and communities to deal with “new situations through the integration, synthesis, and the broadening of horizons. Its meaning derives from dissonance among contexts. It leads to critical questioning of conventional assumptions behind traditional thoughts and actions, focussing on necessary changes. Innovative learning advances our thinking by reconstructing wholes, not by fragmenting reality” (Botkin et al., 1979, p.10). Underlying the idea of innovative learning is the belief that learning involves interacting, meaning-making, reflecting and creating.

In the context of open learning communities, learning is conceived of as a continuous, asynchronous lifelong process that individuals and communities engage in through a variety of experiences and interactions. “Lifelong learning no longer refers simply to recurrent education or to a second chance for those who missed out in the first instance. Rather, it is a genuine lifelong endeavor, from the cradle to the grave.” (Hasan, OECD, 1997). The notion of learning challenges popular thinking which believes that learning is the prerogative and responsibility of the young. It argues that one is never too old to learn. Active learning can and does take place at all ages. The brain is remarkably plastic, constantly learning throughout the span of one’s life (Caine and Caine, 1994).

### **Learning to Learn**

The notion of learning to learn is essential if individuals and communities are to actively engage in the processes of discovering and creating the ‘for what?’ of learning. Advances in neuroscience (Caine and Caine, 1994) tell us that there is no limit to growth and to the capacities of humans to learn more. Neurons continue to be capable of making new connections throughout life. Every human being can learn to be more intelligent (Caine and Caine, 1994). There are no longer categories of ‘smart’ and ‘dumb’ learners. All people can learn to become more effective, flexible and organized learners. What becomes important in this context is our ability to continually develop the capacities to tap into our potential. “The deeper meaning of learning to learn is associated with learners learning to extend and master their own capacities for learning” (Boulton, 1992). Learning to learn also calls for extending the notion of literacy beyond its functional definition to include multicultural literacy, technological literacy, democratic literacy, ecological literacy, critical media literacy, and so on.

Learning to learn is also linked to empowerment. Each person develops a concept of ‘self-as-learner.’ Learning to learn involves developing oneself: to engage in critical reflection and creative thinking; to open up to other people’s ideas, attitudes, and feelings; to become aware of and access learning resources through a variety of media; to recognize and question one’s implicit assumptions; and to become less fearful of change (Dickinson, 1994). Learning to learn is also closely associated with processes that encourage us to think about our learning. Metacognition is used to refer to an awareness of thought processes, and metamood is an awareness of one’s own emotions. The term self-awareness reflects an ongoing attention to one’s internal states (Goleman, 1995, p.4). The capacity for self-awareness is directly linked to individuals becoming self-directed learners, taking responsibility for their own learning.

### **Recognizing and Appreciating the Diversity of Learners**

Though we all have the same set of physical systems, we must begin to recognize and appreciate the diverse, complex, multifaceted nature of each human learner (Caine and Caine, 1994). Some of this difference is a consequence of our genetic endowment. Some of it is a consequence of differing experiences and differing environments. The diversity is expressed in terms of personality and interests, cultures and family background, differing talents and intelligences, learning styles, motivation levels, and special needs. Vast ranges in diversity are characterize what it means to be fully human.

Several theories related to intelligence have emerged, for example, to support the notion of diverse learners and learning processes. Gardner (1991) has advanced the idea that there are at least seven different human intelligences that allow us to engage in learning in order to make sense of the world: (1) language; (2) logical-mathematical analysis; (3) spatial representation; (4) musical thinking; (5) the use of the body to solve problems or to make things; (6) an understanding of other individuals; and, (7) an understanding of ourselves. Robert Sternberg has put forth categories of componential intelligence, creative intelligence and practical intelligence (cited in Dickinson, 1994). Perkins (1996) offers the neural, reflective, and experiential aspects of intelligence. Goleman (1995, p.34) raises the dimension of emotional intelligence which includes: “abilities such as being able to motivate oneself and persist in the face of frustrations; to control impulse and delay gratification; to regulate one’s moods and keep distress from swamping the ability to think; to empathize and to hope.” Every human being has his or her own complex portfolio of intelligences. Learners’ abilities to engage in learning are derived from these different intelligences which are called upon in different contexts. It should be clarified that the idea of a portfolio of intelligences is not fixed. Learning also involves processes for allowing us to continually develop, connect and enhance our different human intelligences. Learning should thus be viewed as an intensely personal experience.

### **Supporting a Diversity of Learning Styles, Approaches and Environments**

It is now recognized that students do not learn the same way (Dickinson, 1994). Each individual learner has a set of preferred ways of taking in and processing information and expressing themselves as well as their own paces at which they do so. They also have their own preferred learning environments. Learning style researchers, for example, point out that individual differences exist such as the preference for learning alone or in groups, concretely or abstractly, through books, charts, computers, video, oral stories and debates, etc. (cited in Dickinson, 1994). At the same time, different senses, different mind/brain attributes (such as conscious/ unconscious learning) and different media/channels influence how different learners process information, construct meaning and express themselves. Different multisensory interactions and modes of communication and expression allow us to see the world in different ways. The challenge that emerges from this understanding of the diversity of learners is the need to both appreciate that learners are different and need choice, while ensuring that they are exposed to a multiplicity of contexts (Caine and Caine, 1994). Underlying this is the critical issue of motivation and support i.e., encouraging learners to take learning risks and assisting them when they ‘fail’. Addressing this issue in meaningful ways starts with attempting to value the knowledge, information, experiences, interests, needs, aspirations, and Active Learning Capacity (Levinger, 1996b) that each individual learner comes to a learning process

with. It also involves understanding and validating the sorts of natural learning (Schank, 1995) processes that learners are involved in in various aspects of their lives.

Several other dimensions are important to note when seeking to create learning contexts which nurture learners. Approaches should support situated learning i.e., learning should be placed within a culture of needs and practices that gives the knowledge and skill being learned context, texture and motivation. This involves making concerted efforts to understand, promote and link to the various potential learning channels (Anzalone, 1995) that learners interact with on a daily basis. In addition, we should to support the creation of “educational settings with thinking-centered learning, where students learn by thinking through what they are learning about” (Perkins, 1992, p.7). The processes of learning should be conceptualized as being inherently social. “All learning involves socially organized activity” (Greeno, 1997, p.10). Continually learning together is critical to building social relationships, negotiating difference and resolving conflicts. Approaches of collaborative learning and active participation are crucial in this process. Michael Schrage defines collaboration as an act of shared creation and/or shared discovery (cited in Levinger, 1994a). In addition, it is important to support different groupings of learners e.g., multi-age, inter-generational, multicultural, cross-gender, cross-class/caste, cross-professions, etc. Within the context of open learning communities, the notion of an omnipotent and omniscient teacher as “expert” is strongly challenged. Classic roles around who is the teacher and who is the learner become mutated and enter into a perpetual state of flux (Visser and Jain, 1996).

### **Learning is Inherently Political**

Learning is not a value-neutral set of processes. Learning is closely linked to different ideological positions and has political, cultural and socio-economic dimensions. The international development community, however, tends to discuss education as if it were something quite neutral. Very rarely, has this group been required to make explicit its ideological biases. “There neither is, nor has ever been, an educational practice in zero space-time-neutral in the sense of being committed only to preponderantly abstract, intangible ideas” (Freire, 1994, p.77). Inherent in the processes of learning is a deeper struggle over discourse and power. “Discourses are not just about what can be said, and thought; but also about who can speak, when, where, and with what authority” (Foucault, 1981). We must therefore continually be aware of the various ideological implications of learning and seek to make explicit our positions and actions within these.

It has been argued that the learning that takes place in schools has been used to reproduce inequities of society or to exclude people from power. Giroux (1992, p. 11) describes that, “What the dominant educational philosophies want is to educate people to adapt to those social forms. Rather than critically interrogate them.” In this sense, education *follows* society. Under a different philosophical orientation, however, learning can be seen as a set of processes to *lead* society. This is the case if learning is seen as processes of actively constructing knowledge rather than a mechanism for transmitting knowledge. The processes of learning become a means for negotiating identity and (re)defining attitudes, challenging the dominant social order, and reconstructing power, roles and relationships, and reappropriating the social, political, cultural forces that shape the existence of individuals and communities. Freire (1971) discusses this dialectical interplay of action and reflection that constitutes the process of

*consentization*. He argues that authentic participation in learning leads to a “freeing”; it is an emancipatory experience, resulting in actual liberation.

### **PERSPECTIVES ON ‘COMMUNITIES’**

Some key vectors: humanism, participation, motivation and support systems, local knowledge systems, gender, culture, heterogeneity, social justice, cultural pluralism, virtuality.

The element of ‘communities’ is critical to consider as it constitutes the socio-cultural context for bringing individuals together to engage in shared meaningful experiences. Such interactions form the basis for learning and for our becoming more fully human. It should be noted that there is no single generic, homogenous, universal community; rather, numerous types of communities exist throughout the world. Although this may seem to be an obvious statement, the international development community’s discourse often fails to reflect this understanding as we tend to use the term ‘communities’ to loosely refer to a widely divergent set of social groupings with different purposes, cultures, scales, etc. Recognizing the complexity and diversity of communities and their associated layers is important to supporting communities. For example, Bray (1995, p. 1) cites Hillery's (1959) classic paper which notes as many as 94 alternative definitions of communities created for a variety of purposes, including those based on:

- geographic affiliations such as a village, rural district or urban areas (it is also important to note that because of modern technologies the community no longer has to be organized only in terms of physical location -- we now witness the emergence of many virtual communities);
- ethnic, racial, linguistic and religious groupings;
- sex and age;
- common occupations, interests, or experiences;
- a resistance to some outside force or threat;
- shared family concerns;
- a general shared philosophy.

Each community has its own peculiar identity which engenders its meaning, purpose, and intentionality and provides coherence around which system stability emerges (Marshall, 1996,185). Communities are formalized in the sense that they do have some structure, a set of rules and logic to them, and several dimensions of culture. Urevbu (1997, p. 5) describes that, “Specifically, culture consists of language, ideas, beliefs, customs, codes, institutions, tools, techniques, works of art, rituals, ceremonies, and so forth.” Communities also typically have several knowledge systems in parallel operation i.e., oral, public/private, male/female, religious, etc. and they are linked to different social, political, and economic institutions. Communities, however, have different sizes and boundaries. They are open in varying degrees to different types of information and people. Throughout the course of their lives, each individual participates in many different kinds of communities, with varying roles and objectives. A particular community is an evolving space in which the community’s own identity and culture and that of its members is continually being defined, challenged, negotiated, and recreated by both its members and by other communities. Communities may

emerge, evolve or collapse rather spontaneously through the unplanned interaction of many of dynamic and informal institutions and forces.

There is an intimate link between learning and communities. Strong communities are important for learning, and learning constitutes an important process of building and linking communities. Communities provide a humanizing setting for learning, which has been previously described as an inherently social activity. Communities provide an essential forum for making sense of the world, exploring and building natural historical and cultural ties, negotiating difference, drawing from and building moral and ethical frameworks, and creating development alternatives. Caine & Caine (1996) add, "Part of our identity depends on establishing community and finding ways to belong. Learning, therefore, is profoundly influenced by the nature of the social relationships within which people find themselves." Communities also provide the cultural specificity for situated learning. It is essential, however, that individuals be able to participate in different communities in order to develop different contextual frameworks. It is also important that efforts must be made to mediate and link the learning that takes place in different settings.

In the context of open learning communities, a community must be a "safe" space where learners can explore, share and grow. Complex learning is enhanced by challenge and inhibited by threat (Caine & Caine, 1996; Dickinson, 1994). The brain/mind learns optimally - it makes maximum connections - when appropriately challenged in an environment which encourages taking risks. Positive emotions such as trust, love, tenderness and humor can facilitate learning. However, the brain/mind "downshifts" under perceived threat. It then becomes less flexible, and reverts to primitive attitudes and procedures. Negative emotions such as hostility, anger, fear, and anxiety can downshift the brain. This implies that a community must be "personalized" rather than depersonalized i.e., looking at each learner as a special human being that belongs not numbers. Marshall (1997, p. 183) states that within a community, "We must create a learning culture that provides a forum for risk, novelty, experimentation, and challenge."

Learning is also critical to creating new communities and linking them to one another. In recent times, there has been a great deal of romanticization around the notion of traditional communities. In discussing communities, we must not overlook the harsh realities that sometimes exist in many communities such as, resistance to new ideas and problems of unequal power relationships around race, class, gender, sexual preference, caste, age, etc. Nor, should we ignore that communities are often formulated in exclusionary closed terms with membership being tightly controlled. Burnett adds that within communities, "conflict is inevitable and what families and communities *learn* to do is manage the conflicts to arrive at some measure of agreement, or even to more fully understand what divides them" (Burnett, 1995, p. 287). Healthy communities are premised on both the individual and organization's ability to enter into dialogue and negotiate conflicts. Learning is the process by which we begin to understand each other, to engage in different roles and relationships, to make sense of the conflicts around us, to see new opportunities for connection and create new identities. Learning is also about strengthening and evolving local knowledge systems and, at the same time, developing self-confidence in one's 'tradition, imagination, intellectual and organizations reserves.' The continued growth of such local knowledge systems coupled with the construction of critical frameworks for viewing other knowledge systems underlie the levels of

creativity and sustainability of people-led development movements. In addition, learning together helps to create the underpinnings of trust -- a sense of mutuality, of reciprocal loyalty -- between people (Handy, 1995).

Processes of learning are also critical to connecting communities to each other. As discussed, some communities have been created along more closed boundaries, other communities are sometimes hostile. By bringing in new energy and information and stimulating a process of dialogue, learning can be a force for opening up communities and facilitating meaningful gender-aware, inter-generational, and cross-cultural interactions within a community and across communities. Communities learning with each other helps to build bonds between them.

### **THE GESTALT OF 'OPEN LEARNING COMMUNITIES'**

Some key vectors: empowerment, ecosystems, self-organizing, networks within networks, biodiversity, organizational learning, distributed intelligence, interdependence, co-evolution, hope.

When put back together, the energy and relationships inherent in open learning communities becomes much greater than simply the sum of its parts. The concept of open learning communities seeks to provide a dynamic alternative framework for seeing and acting in the world. Although I have tried to identify certain principles that are important to the concept, it should be repeated that there is no such thing as one open learning community, nor should there ever be one. Open learning communities represent a celebration of differences and a desire to construct pluralistic environments which promote and foster these differences.

Many examples exist today of the wide range of social groupings that represent potential open learning communities, such as regional configurations, cities and villages; women's associations; youth clubs; workers' cooperatives or unions; corporations and their departments; academic circles; religious groups; extended families; television and radio audiences; and World Wide Web sites. Conventional schools, although currently not considered to operate as open learning communities, can potentially transform themselves into open learning communities. For example, Perkins (1992) describes what he calls "smart schools" as exhibiting three characteristics: informed, energetic, and thoughtful (both in terms of caring and being thinking-centered).

Open learning communities are never fixed entities. The principle of self-organization implies the continual spontaneous emergence of diverse new communities and, at the same time, collapse of other communities (Capra, 1996). Within this context, every open learning community is a learning organism with its own evolving consciousness. Gephart et al. (1996, p. 36) describe "a learning organization is an organization that has an enhanced capacity to learn, adapt and change. It's an organization in which learning processes are analyzed, monitored, developed, managed and aligned with improvement and innovation goals."

Viewed as a complex adaptive system, the open learning community is constantly revising and rearranging its building blocks as it gains experience. It changes and adapt according to the divergent needs and interests of individual learners who participate and contribute to it as well as in response to the broader needs of society. To do this, flexibility, maneuverability and

adaptability are important characteristics. This implies that the scale/size of the open learning community becomes critical. Massive systems characterized by rigid hierarchies, rules, structures are ill-equipped to manage change, and even less able to support innovation. In this context, the “small is beautiful” concept takes on a whole new meaning. Systems may be constructed along smaller, more flexible parameters.

An open learning community must also continually reflect on itself in order to remain purposeful. Feedback loops enable a community to regulate itself, correct its mistakes, and re-organize itself. Such feedback loops are integrally linked to a process of being able to listen to voices from within and outside, to learn from them, and to allow the energies inherent in them to facilitate the process of social innovation and transformation. An open learning community is not only capable of adapting or even embracing change, it can generate change from within and can share this change with other open learning communities and their larger environment. In this sense, it is not simply a reactionary entity but rather a pro-active agent of change.

It is important that open learning communities not be viewed as isolated parts. Rather, they should be seen as a set of relationships operating within a larger learning ecosystem. “The ecosystem concept is defined as a community of organisms and their physical environment interacting as an ecological unit” (Lincoln, 1982). A learning ecosystem is comprised of a larger physical environment and layers of environments, various open learning communities and their layers, and individual learners who enter into the environment. Within this context, open learning communities, vertically and horizontally layered upon one another (i.e., overlapping), function as networks within networks (Capra, 1996, p. 35). An important aspect of the learning ecosystem is that it optimally uses and distributes the intellectual, experiential, spiritual, and material resources available to it. Lester Brown clarifies that “a sustainable society is one that satisfies its needs without diminishing the prospects of future generations” (cited in Capra, 1996, p. 4). Another important aspect of the learning ecosystem is biodiversity, both in terms of different forms of life and in terms of cultural and linguistic diversity. Capra (1996, p. 303) describes the essential need for this diversity, “Ethnic and cultural diversity means many different relationships, many different approaches to the same problem. A diverse community is a resilient community, capable of adapting to changing situations.” Diversity allows learners and communities to see their problems from varied perspectives and encourages them to develop different ways of dealing with them.

A particular physical environment is comprised of a set of open learning communities which loosely operate within it. However, because of the various layers that exist (i.e., network of networks), a space can simultaneously be both an environment which is comprised of its own associated layers of communities and an open learning community. The institution of UNESCO, for example, is both an open learning community which operates within a larger set of environments, and an environment which supports multiple open learning communities. Each environment has its own architecture and space, information and communication technologies, values, constructs of time, policies and rules, structures, roles, relationships, resources, distribution of power, etc. These are not necessarily the same as those of the open learning communities which they support and sometimes may even contradict them. The environment plays a large role in influencing the organization and culture of a particular open learning community and its relationship with other open learning communities while, at the same time, the environment is being influenced by the open learning communities. There is a

dialectical set of relationships in place. The environment is also critical to supporting the notion of distributed intelligence. Perkins (1992, p.135) describes this, “The surround-- the immediate physical, social and symbolic<sup>15</sup> resources outside the person -- participates in cognition, not just as a source of input and receiver of output but as a vehicle of thought. The surround in a real sense does part of the thinking. . . The surround in a real sense holds part of the learning.”

Open learning communities within the same environment also influence and are influenced by each other. The flows of resources, information and energy form the basis for these relationships. Capra (1996, p.298) describes this sort of interdependence as, “living organisms derive their essential properties and, in fact their very existence from their relationships to other things.” Within this context, communities are continuously struggling with the tension of autonomy and differentiation vs. integration (Botkin et al., 1979; Laszlo, 1992). How can an open learning community maintain and evolve its own identity and at the same time be linked to other open learning communities? Power relationships between communities (and cultures) have historically been uneven and exploitative, characterized by Riane Eisler as ‘the dominator system of social organization’ (quoted in Capra, 1996). These conceptual models need to be replaced with notions of co-evolution (learning and changing together) and partnership. Capra further describes these types of relationships as, “The tendency to associate, establish links, live inside one another, and cooperate.” Under such a conceptualization, open learning communities try to complement/ reinforce/challenge each other to ensure mutual survival rather than dominate one another.

Open learning communities are also influenced by the individuals who choose to participate in them. Land and Hannafin (1996, p. 37) explain, “The learner does not merely respond to the system; rather, he or she is integral to it.” Learners are viewed as active constructors of the various open learning communities. Within this framework, individuals are able to participate freely in many different open learning communities, moving in and out as they wish. Notions of membership are loosely defined. In the context of their participation in different learning communities, individuals are given the opportunity to play different leadership roles and engage in different sorts of relationships. These roles and relationships are continually evolving. Open learning communities also serve as institutions of reflection for individuals by continually demanding that people critically reflect on their values, attitudes, feelings, behaviors and actions and by encouraging them to engage in creative dialogue and action.

Finally, underlying my vision of open learning communities is a deep sense of optimism -- it is possible to transform the world in meaningful ways. Despite what the cynics may say, there still does exist multiply diverse spaces for seeing, understanding and interacting in the world and we must continue to support and promote these. Paulo Freire (1994) appropriately summarizes the challenge, “We are surrounded by a pragmatic discourse that would have us adapt to the facts of reality. *Dream*, and *utopia*, are called not only useless but positively impeding. . . But the attempt to do without hope, in the struggle to improve the world, as if

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15. Perkins (1992) describes socially shared symbol systems as speech, writing, the technical argot of specialities, diagrams, scientific notations.

that struggle could be reduced to calculated acts alone, or a purely scientific approach, is a frivolous illusion.” Hope is therefore an essential element of open learning communities. The hope which sustains open learning communities is grounded in a belief in the fundamental goodness of human beings and in the beauty of the unpredictability of life.

## V. THE PROCESS: FROM BOOK TO WEB SITE

*“To encourage innovative societal learning, true participation must enable people to open and inspect the “black boxes” of knowledge, to question their relevance and meaning, and to re-design, re-combine, and re-order them where necessary.”*

Botkin et al., No Limits to Learning, 1979

The concept of open learning communities represents a recognition of the diversity and complexity of learners, learning processes, communities and ways of “seeing” realities. It should be repeated here again that the vision(s) guiding open learning communities is not fixed, nor are the approaches to realizing them. The previous section has attempted to articulate a few elements of what is actually a much more expansive and diverse vision. The basic thrust of open learning communities lies in utilizing much of what we already know about learning through research and experience, seeing new realities and opportunities, developing new roles and relationships, respecting and fostering diversity, and stimulating new activities in order to give space and life to various socio-spiritual spaces. The implications surrounding the development of open learning communities are, however, immense and overwhelming. They will require that whole new methodologies and frameworks be constructed, new discourses be created, new organizational structures be conceived, new approaches to ‘training’ be developed, new mechanisms for assessment and evaluation be formulated, and new attitudes be nurtured.

Throughout all of this, what will be most important to continually emphasize will be the process of engaging with people around the world to visualize and operationalize their own personal vision and linking this to a complex shared vision(s) of open learning communities. The process of developing the vision of open learning communities is critical if it is to mean more than words on a piece of paper or slogans of good intention. The process should reflect the idea of ongoing participatory conceptualization i.e., that individuals and communities should not only be responsible for designing, implementing and evaluating open learning communities, but also be integrally involved in a continual process of conceptualizing and modifying the vision that guides them. Each individual and community must seek to understand the ideological and practical implications for themselves and for others, as well as for the present and for the future.

Such a process entails a fundamental shift in metaphor -- from that of a book which is written and disseminated by the well-schooled elite to that of an interactive World Wide Web site that is constructed through more participatory and egalitarian methods. The focus of the shift, to clarify, is not on the medium (the author is not arguing that we should not have books); but

rather, on the sets of attitudes, processes and relationships that surround the medium. Botkin et al. (1979, p. 81) describe the traditional metaphor of the book, “The conventional, often unarticulated, conception of how societies learn usually starts with one or more centers of concentrated competence as the emanators of new discoveries, theories, beliefs and solutions. These new ideas are then disseminated to larger circles of people and the public at large. The role of society at large is reduced to adjusting to and consuming the discoveries and knowledge produced at centers of expertise.” The production of books tends to be linked to elite power structures and centers of concentrated competence. The publishing and distribution channels for books are also tightly controlled. For example, the writing of books is usually done by someone regarded as an ‘expert.’ Knowledge tends to be seen as fixed and sacred, often regarded as a commodity. With the metaphor of book, the emphasis is on ‘dissemination’ and ‘distribution’ whereby readers are typically viewed as passive receivers. The book also, in certain ways, limits our interaction around the ideas that are raised; keeping a safe distance between the writer and the reader. The structure of the book is typically structured in a linear progression, and must be read in this way. There is very little flexibility for the book to evolve. As we read the book, we can scribble on the margins and underline the words but cannot fundamentally contribute to altering the meaning of the text. Nor, can we engage with the author around the ideas -- the author is allowed to hide behind the medium. We are prevented from entering into constructive dialogue in order to learn from as well as to challenge and influence the author. Out of frustration or anger, individuals may refuse to read books and sometimes try to burn them, but these destructive forms of resistance come with great individual and societal pricetags.

In place of the metaphor of the book<sup>16</sup>, the author would like to propose the metaphor of a Web site that is continually under construction, with love.<sup>17</sup> This Internet has been described as a ‘great democratizing force’; a liberating and empowering tool. Under the metaphor of the Web site, there is a concerted effort to move from approaches of one-way dissemination to two-way sharing. Such a metaphor is geared around encouraging us to see ourselves as actively constructing and unfolding our own vision of open learning communities, and linking it to the visions of others. Knowledge is seen as dynamic and evolving. The construction of the Web site constitutes a profound shared social experience -- seen as something that the various participants build together. Furthermore, power over the process is transformed. Each one of us can contribute to and modify the vision of the site with text, pictures, sounds, videos; we can interact with each other around ideas; we can hyperlink our sites to other Web sites; we can even create our own sites. We should, however, be very aware that the medium of the Internet is not exempt from attempts at social control -- efforts are currently being made by some institutionally entrenched actors to reproduce the metaphor of the book on the Internet.

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16. Stewart Brand (1984) discusses how Marvin Minsky in writing *Society of Mind* (1987) began experimenting with this shift in metaphor. The book, with its one idea per page and ten-year interactive, informal process, became “a living, adaptable thing.” Minsky wanted to “extend the process with new editions monthly or so as long as the book was useful, with bad ideas lined out amid marginal rude remarks and new ideas inserted along with commentary by readers” (102).

17. A colleague recently challenged me with the idea that the term ‘construction’ connoted something very male-centered, and something very functional that lacked positive feeling thus I add the clause ‘with love’.

Engaging in processes of constructing the open learning community Web sites calls for a special set of attitudes and commitment. It will require that one be willing to move beyond fixing, defending, rationalizing or thinking solely in terms of the institution of schooling. It will mean exploring how to link learning back to the deeper social, political and spiritual problems that face our world. It will require a commitment to enter into the often confusing and frustrating struggle of asking some basic philosophical questions -- who are we as human beings, where are we coming from, and where are we going to. It will involve optimistic risk-taking -- "a willingness to initiate fundamental processes of change, even when all of their implications are not known with total certainty in advance" (Botkin et al., 1979, p.87). It will ask that we reconsider our own privileged positions and the power structures to which we derive our authority from. It will require that we be open to experimenting with new ways of sharing and redistributing power. Finally, it will demand that we be willing to struggle in building open learning communities into our own lives and environments rather than simply seeking to force them onto others.

## V. POSTCARDS FROM THE EDGE OF CHAOS

*"The 'untested feasible' is an untested thing, an unprecedented thing, something not yet clearly known and experienced, but dreamed of."*

Paulo Freire, Pedagogy of Hope, 1994

The obstacles that stand in the way of envisioning open learning communities appear to be quite overwhelming. There are the vested interests of the educational establishment with its teachers' unions and textbook publishers and building contractors. There are the vested interests of the nation-state and resistance of politicians who are unwilling to make decisions which might jeopardize their political power. There are also the vested interests of the development industry which continue to see certain countries and groups as 'developed' and delinked from the problems of the South, and are fundamentally unwilling to challenge this deficit approach. Finally, there is the loosely aligned vested interests of modernity which rely heavily on the institution of schooling to reproduce its ideological frames of reference and socio-economic relationships. These various interest groups threaten to crush the concept of open learning communities.

Luckily, the world is a dynamic place where new discoveries are continuously being made, new institutions and relationships being formed, new opportunities are emerging. M. Mitchell Waldrop (1992, p.12) provides some strategic directions, "All complex systems have somehow acquired the ability to bring order and chaos into a special kind of balance. This balance point -- often called the edge of chaos -- is where the components of a system never quite lock into place, and yet never quite dissolve into turbulence, either. The edge of chaos is where new ideas and innovative genotypes are forever nibbling away at the edges of the status quo, and where even the most entrenched old guard will eventually be overthrown." Our challenge is then to identify and nurture those opportunities at the edges of chaos and to prevent their being co-opted by the various vested interests. The encouraging news is that

many positive initiatives are underway throughout the world with new opportunities emerging every day.

### **LWF: STRUGGLING TO MAKE SENSE OF OPEN LEARNING COMMUNITIES**

It is against this mixed backdrop of global and local challenges, intellectual vectors, and obstacles that Learning Without Frontiers is being developed.<sup>18</sup> The LWF unit, housed in UNESCO, is attempting to partner with others from around the world who are involved in developing different visions of how to change the world of learning. The LWF unit is also engaged in a perpetual struggle of trying to define and redefine itself and its environment (including, UNESCO) as open learning communities. The need to engage in this personal struggle to put open learning communities into practice in our own lives (both real and virtual), we are discovering, is essential to helping us develop our broader vision(s) of open learning communities.

The strategy guiding the LWF unit in its work is derived from a tension that is continually being negotiated on the basis of an understanding of the complexity of different issues at stake, the bureaucracy that we work in, the institutions that we work with, the diverse environments that we operate in around the world and the constraints that we face. The strategy is also based on a understanding that we must attempt to situate ourselves and our activities at the edge of chaos, tenuously placing ourselves in a constant “push and pull” with the different systems that we are in contact with. As a unit, we are involved in a fluid process of engaging in varying degrees of action and reflection along three inter-dependant layers of strategies and activities -- (1) conceptual inputs, (2) policy and institutional capacity building, and (3) pilot projects and field applications. We very much see our role as trying to dynamically link research and practice, and practice and research. This, to a large degree, has involved both identifying and generating progressive opportunities as well as networking with inspiring partners both within existing formal and non-formal education systems as well as outside of them.

We are continually looking for new projects that will help to elucidate and elaborate the concept and practice of open learning communities. Interestingly, LWF activities have thus far focused on areas which have tended to be regarded more at the fringe of conventional education systems e.g., certain forms of distance education, community schools, in-service teacher training, special needs education, and early childhood development. There has been greater flexibility in introducing and developing innovative approaches related to open learning communities in these domains. LWF has also become heavily involved in activities centered around various information and communications technologies (ICTs) e.g., interactive radio and television, computers, and the Internet. These ICTs have considerable institutional and operational potential in shaking up rigid bureaucracies and changing organizational behavior, introducing spaces for raising questions and supporting dialogue, assisting people in seeing new realities, and transforming thinking and practice around learning. It should be clarified

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18. LWF was initially conceived of at the end of 1993 by the Ad Hoc Forum for Reflection which advised UNESCO to work towards a world system of open education that would enable all people throughout the world to obtain access to all forms and levels of education within the context of lifelong education which would establish a continuum between universal primary education and higher forms of education.

that we view technology as a tool for enabling and supporting open learning communities -- it is a means not an end. This being said, we are continually being confronted with the overwhelming nature of technology and are always struggling to keep technology from dominating our agenda.

Partnerships are also a critical element in the development of LWF. A unique aspect of LWF is that it is envisioned as a non-proprietary concept i.e., that UNESCO does not 'own' it. With this understanding, the role of the LWF unit then is merely to provoke, stimulate, assist, facilitate, and connect with others interested in the concept (in fact, we seek to assist others in connecting directly with each other thereby eliminating our roles as intermediaries). Our challenge has been not to view different organizations as monolithic institutions, and treat them as such, but rather to identify exciting people and projects. Our growing number of committed partners today comprises dynamic individuals from governments, NGOs, universities, think/do tanks, international donors, various international networks, and private companies from around the world. The collective visions and activities of these partners ultimately define what LWF is and what it will become.

It should be pointed out that various elements of our strategy are continually being revised and experimented with as we face new hurdles, and learn new things about open learning communities and about ourselves. Arriving to where we are today has, to say the least, been a messy process.<sup>19</sup> Within our unit and with our partners, we have tried to create an honest and open environment in order to be able to learn from our mistakes.<sup>20</sup> Over the past year, several issues have been passionately debated concerning the directions that LWF should take, both on an ideological level and on an operational level. I would like to describe some of these based on my perspective within the LWF unit. We have been confronted with such questions as to what extent should LWF operate from the modernist deficit approach of trying to "reach the unreached and the excluded." How is LWF different from the Education For All Movement that was begun in Jomtien in 1990? We are also continually thinking about and debating how to put LWF into practice with questions such as whether a particular project provides enough leverage at the edge of chaos and whether it actually contributes to the construction of open learning communities. Should we seek to start new activities or try to transform existing projects? Should we take incremental steps or seek more dramatic changes in a particular environment? What is the appropriate scale of the projects that we should try to encourage and develop?<sup>21</sup> What kind of partners should we direct our efforts at i.e.,

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19. Rondinelli (1983) aptly describes the iterative process that we have sought to undertake in LWF -- regarding planning and implementation as mutually dependent activities that refine and improve each other over time, rather than as separate functions.

20. Rondinelli (1983) argues that every development project should be viewed as a social policy experiment. Under such an approach, errors and mistakes in various projects and activities are not only likely, they are to be expected.

21. Regarding this question, we are continually faced with demands and pressure to produce projects that can be replicated to a large scale or reproduced in different parts of the world. The author is of the view that we must move away from the massive mass production/replication mentality and start to construct more activities along the "small is beautiful" line.

governments and the nation states, local NGOs, private sector, transnational networks, etc.? To what degree must we share overlapping concerns, i.e., some or all, with these partners? How do we continually transform ourselves into an open learning community, both in the physical as well as the virtual environments in which we work? And, can an initiative like LWF be developed within a traditional bureaucracy and an environment that is politicized to the extent that an intergovernmental organization like UNESCO is?

In discussing these kinds of issues amongst our team, we are continually faced with the limitations of language. We realize that we do not have the words today to describe complex relationships (between people, time, disciplines, places, experiences, etc.). Much of the existing discourse around learning in the context of development, in particular, is framed in relation to formal or non-formal education and schooling. We are further constrained by the various connotations and meanings of words like 'school' or 'community' that we each bring from our different individual international experiences. In many ways, our own personal experiences have influenced how we see change, opportunities, constraints within the context of different realities. Underlying the discussions has been a tension around varying opinions and feelings towards the notions of idealism and pragmatism, and our understandings of what these terms mean and how they are related. Engaging in these debates in LWF has not led to any conclusive answers, rather, if anything, it has served to raise more questions. It has also forced us to try to reconcile and live with the uncomfortable feeling of ongoing contradictions, inconsistencies and general messiness. Finally, engaging in thinking about open learning communities and trying to put them into practice has forced us to confront our own roles as international experts, teachers, learners, friends, parents, members of a community and human beings.

To many people involved in the regular business in the field of education, the discussions that have been presented up to this point will sound utterly utopian, idealistic or just plain crazy. They will read this paper in the context of how they currently "see" their realities and attempt to dismiss it as not being practical, not being realistic, or just too difficult to implement. Some may even argue that we do not have enough money to do this. I appeal to these people on two grounds. My first argument is that we are in a very critical juncture in the history of humanity and the survival of the planet. Can we afford to limit our responses to simply trying to do more of the same, particularly when we have very little evidence that yesterday's solutions actually work? My second question is, do we really have a choice? The intellectual heretical vectors and the forces of change that they have unleashed are already in the air. Many exciting things are already happening. Not responding may mean that we either become increasingly marginalized or ineffective in our efforts. It may also mean that we witness much bloodshed, pain and destruction as a result of our myopia and apathy. Is it not both our professional, and more importantly, human responsibility to challenge ourselves and seek to expand our ways of seeing the world of learning?

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