Rethinking Learning: Implications for Policy, Research, and Practice

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Learning is a disposition. It involves the entire human being, rather than merely the brain, or the part of it that we hold responsible for our intellectual activity, the neocortex. If learning simply were to be identified with the processes that go on in our brain cells, it would be difficult to distinguish between thinking and learning. Learning is distinct because of its overall intentionality. It serves a purpose. In this short essay,[2] I shall argue why we should broaden our perspective of learning, overcoming the narrow focus on the things that go on in instructional settings such as the school. Key to that discussion is the question why we learn. I shall also discuss a number of aspects that I believe are important for how we should go about creating the conditions of learning in this broader perspective.

LEARNING UNDEFINED

Definitions are useful as a guide for reflection and practice, provided they are adequate. They ensure that we all know what we are talking about and thus allow us to communicate effectively and to collectively make sense of things. They keep us on course. However, when a definition no longer reflects the actual state of practice and the latest developments of its underlying theoretical framework, then it becomes a hindrance. In the case of learning, we have reached that stage.

Actually, learning was never very well defined.[3] Most people simply take the concept for granted, assuming that everyone knows what it means. Because of the prominent focus on instruction in policy documents and public discourse, learning is easily understood to be the result of instruction. No wonder then that most learning related research is in fact research of instructional processes and their efficiency and effectiveness.

Surprisingly though – or perhaps it is no surprise at all – when people are asked to identify their most profound learning experiences, those that have made a real impact on their lives, they often refer to events that were either totally unrelated, or at best only marginally related, to the formal instructional settings they have been part of. The Learning Development Institute (LDI), in collaboration with UNESCO's Learning Without Frontiers, recently embarked on a systematic effort to clarify the meaning of learning, among other ways by collecting people's learning stories. Approximately 25 participants in an international workshop on *In Search of the Meaning of Learning: A Social Process of Raising Questions and Creating Meanings* recounted what they felt were their most significant learning experiences. The stories they told are currently being produced in written form to be included in a 'learning stories page' on the LDI website.[4] Initial analysis of their content shows a rich variety of ways in which these learning experiences give direction to people's lives.

Even more impressive is the enormous variety of conditions that allows these experiences to develop. Clearly, no single setting can be held responsible for the development of

learning in and among human beings. Instead, there is a rich tapestry of conditions – related for instance to the family environment, the school, the workplace, individuals who come to play a specifically significant role in other people's lives, the broadcast media, museums, libraries, the Internet, places of worship, and nature – that all work together and mutually reinforce each other to promote and facilitate the development of learning in a lifelong and life-wide perspective.

The challenge then for anyone seriously interested in the evolution of a learning society, is in the first place to start seeing learning in the myriad ways it makes sense to ordinary people, and in the second place, to discover effective ways to nurture the rich variety of conditions necessary, rather than focusing on just one area of concern, such as the school. In other words, we must undefine the learning concept and liberate it from the narrowness of interpretations that has hampered its full development.

WHY WE LEARN AND WHAT IT IS TO BE LEARNING
Four things about learning are essential. In the interest of brevity, I present them here without the thorough argumentation I have developed elsewhere.

Constructive Interaction with Change
Human learning is a feature of our species that we may assume to have its roots in evolutionary history. If we, as a species, would live in an environment where everything would always stay the same, there would be no need to learn. We would be best off if we had been preprogrammed to suit, in the best way possible, the particular set of unchangeable circumstances that were ours for eternity. In fact, if such were the world, there would be no evolution and it is doubtful if the notion of 'life' would still apply to that world. The fact that life is what it is, thriving on diversity and continuous change, forces us to look upon our world and ourselves in a fundamentally different way. Things change all the time and so do we. We do not merely react to change, we also produce it. We are part of the ever-changing universe ourselves. Our capacity to interact *constructively* with change is key to what we may consider the ultimate wisdom of nature. To make it possible to interact constructively with change, we are equipped with the ability to learn.

We are not alone in our ability to learn. All forms of life are characterized by some sort of learning ability. We see it most clearly in the other members of the order of mammals we pertain to ourselves, the primates. Life and learning can even be studied at the level of artificial structures. The development of computer science has much contributed to this field. Thus, artificial life and artificial intelligence have become objects of serious scientific investigation.

What is particularly *human* about human learning is our ability to learn consciously. We reflect on our learning behavior, direct it to chosen purposes, decide what to learn, what not to learn and what to unlearn. We are also able to enhance our capacity to learn and decide that it is important to do so. Moreover, we take charge of the learning environment that surrounds us and thus influence the learning opportunities of other people. Not always do we recognize the full scope of our social responsibility for the learning

environment at large. While it is quite common for societies to accept and develop their responsibility for school-based learning, sometimes to the extent of over-controlling it, other areas receive far less attention. For instance, the learning that results from people's interaction with the media environment often largely escapes serious social scrutiny and reflection. The under-appreciation in many of today's societies of the family environment as an important constituent of the larger learning environment is another example.

The Dispositional Nature of Learning
Learning is, as stated earlier, a *disposition*. As such it is both: (1) an attitude of openness, i.e. an *emotive disposition*, and (2) a state of preparedness, i.e. a set of skills, a *meta-cognitive disposition*, an ability to learn. Agreement on this point is important for how we think about creating the conditions of learning in a society. It means that we must attend to the overall motivational context, such as the societal recognition and encouragement of learning and the aesthetic and moral sense attributed to learning, as much as to the more traditional focus on the various facilitating factors – often merely of an infrastructural nature – related to particular instructional settings.

Learning at Different Levels of Organizational Complexity
Learning pertains to both *individuals and social entities*. The latter term refers to collectives of human beings who share a common purpose. Such entities, or learning communities, may be small, like parents together with their children, a sports club, a chamber orchestra, a jazz band, a collective of people who have joined in the pursuit of a desired commercial or social objective. They may be larger as in the case of a school, an extended family, a tribe, a professional organization, the scientific community engaged in tackling a particular problem, a corporation or organization, a political party. Learning communities may even be as big as learning cities, multinational companies, the communities that span the globe bound together by a common faith or religious conviction, entire nations, partnerships among nations, and, ultimately, humanity at large. At all these different levels, learning is the key determinant for how we interact constructively with change. Here it is important to recognize the different levels of organizational complexity at which learning takes place and to understand that the conditions that promote and facilitate learning at the social level are not the same as those for individual learning. It is particularly important to understand that the learning of a particular social entity cannot be interpreted as the sum of the learning behaviors of the various sub-entities or individuals that are part of it.

The Dialogic Nature of Learning
Learning is a *dialogic* activity. "Truth is not found inside the head of an individual person, it is born between people collectively searching for truth, in the process of their dialogic interaction," says Bakhtin (1984 cited in Shotter, 1997). Our schools would dramatically improve if we became more serious about the dialogic nature of learning and would thus de-emphasize the one-way communication processes that characterize so much of what goes on in school-like settings. Dialogue, however, is not restricted to the processes of communication that take place between individuals. The concept extends to what happens between and among the different social entities – learning communities – that reflect the rich variety of organizational complexity present in how we, as human

beings, live, work and grow together. It makes sense, therefore, to think of learning as the defining dimension of a learning ecology: the co-evolutionary existence of humanity, conscious of itself and its place in the universe.

THE CHALLENGES OF THE LEARNING SOCIETY

We live in a critical time. While change has always been with us, the past decades have marked a significant shift for two reasons. In the long-term perspective of evolution, we have reached the stage where we are getting confronted with the limits of our planet and its resources. We have managed to double the human population from three billion to six billion in less than 40 years, an extremely short time span considering the millions of years of hominid development it took to reach the first three billion. Constructive interaction with change, and thus learning, has all of a sudden become essential for the survival not only of us as a species but also for other life forms on the planet. On the other hand, we face the challenge that the rate at which change takes place is now faster than the period typically required for the leadership of one human generation to pass on to the next one (Pais, 1997). Typically, we must adapt to fundamental change within our lifespan. The traditional notion of learning as preparation for life has thus become obsolete, except in one sense: we must learn to learn and learn to unlearn.

Against this background, the challenge of the learning society is enormous. We are looking at problems of a magnitude humanity has never faced before. This is both a threat and an opportunity. The threat is real. The opportunity is there to be taken.

IMPLICATIONS FOR POLICY, RESEARCH AND PRACTICE

Facing the challenge outlined above requires stepping outside the boundaries of the regular educational research, planning and instructional development mindset. That mindset is based on the assumption that instruction is the main condition of learning, which, it assumes, can therefore be planned linearly. Stepping outside that mindset means recognizing the staggering complexity of the learning landscape and assigning overall priority to the organic integration among the different pieces of the learning ecology over and above the concern with individual elements, such as the school system. Below follows a brief, non-exhaustive, list of recommendations:

Policy, research and practice must recognize in the above context what every good teacher and parent knows, namely that learning in different individuals is not the same. This simple fact militates against the notion of, for instance, factory-style schooling. It calls for design practices that are participatory and for the flexible distribution of the tasks to learn and to facilitate learning among the different actors in a structured learning setting, thus stepping outside of the conventional division between teachers and students.

In the same vein, it must be recognized that people (and social entities) learn best if multiple channels are open to them (see e.g. Anzalone, 1995), allowing learning via one channel to reinforce learning via another channel. This means stepping outside yet another traditional division, namely that between formal, non-formal and informal learning. Educational research must expand its horizon and shift its emphasis from research of instructional processes to research of learning. The societal responsibility to

care for the learning environment as a whole, and not just the school system, calls for greater collaboration among different government ministries and other state organs, non-governmental entities, the private sector and civil society at large in matters of governance and policy. Creativeness is required in envisioning new ways and organizational modalities to shape such collaboration effectively. Societal responsibility for creating and maintaining the conditions of learning in this context must address the conditions of the motivation and meta-cognitive preparation to learn in addition to the traditional focus on the instructional processes.

A selection must be made of significant and relevant portions of the learning ecology between which bridges can be built as a first step towards promoting organic integration of the learning environment. An initial choice could for instance focus on the school, the family and the world of work. From thereon one can start expanding. Initial choices will be context sensitive and no standard pattern can be followed. An important criterion for selection is the extent to which these component learning environments can be made to talk to each other. It makes sense to explore the role technologies can play in building the bridges.

In societies in which, often as a consequence of their colonial past, a schism has grown between so-called indigenous knowledge and the kind of knowledge that tends to be emphasized in Western-inspired formal learning systems, the existence of such a schism should be taken as an important challenge. Integrative practices should be encouraged and facilitated that lead to the enhancement of learning inspired by the rich multiple heritage to which citizens of such societies have access.

Linguistic and cultural diversity is a key condition for the continuous growth of humanity. Existing tendencies towards globalization are both an opportunity for and a threat to maintaining and further developing diversity. Choices in policy, research and practice must be oriented towards exploring the former and counteracting the latter.

The school, against the backdrop of the above recommendations, is in for a big overhaul. I recommend that a review of the school focus on the overall concern how the school can be moved out of its state of social isolation and be transformed into an integrated component of the backbone structure of the learning society. An important related concern should be to turn the school into a place where people partake in a process of co-developing and maintaining attitudes, motivations and skills that allow them to be lifelong learners, with particular emphasis on the skills and practice of critical and creative thinking. Concerning the requirement to maintain and develop diversity, I recommend to explore the reshaped school environment as the place *par excellence* for fostering skills and appreciation for cultural diversity and multilingualism.

My final recommendation is a difficult one as it is less well a part of established discourse. Learning is premised on particular spatial and temporal frames of reference. Normally such spatial and temporal frames of reference are not made explicit. Nonetheless, the emphasis on learning as a consequence of instruction has resulted in a dominant pattern of looking at learning as something that happens inside physical

structures of particular minimum dimensions that presuppose learners to sit still and to be on the receiving end of a mostly one-way point-to-multipoint communication process. These physical structures precondition timeframes of learning that are typically those of the lesson (50 minutes); the school term (several months); yearly cycles of student achievement evaluation; and periods of several years, required as part of existing graduation practices. Many of the problems humankind faces relate to spatial and temporal frames of reference that are unrelated to those of the instructional processes. To deal adequately with such problems, there is an urgent need to refocus policy, research and practice to foster learning processes premised on spatial and temporal frames of reference that go beyond the above limitations. Particularly, they should explore architectural designs that focus on openness, the human body as a dynamic entity, and the human mind as spanning timeframes from the ephemeral to the evolutionary, geological and cosmological.

REFERENCES

Anzalone, S., "The Case for Multichannel Learning." In S. Anzalone (Ed.), <u>Multichannel Learning: Connecting All to Education</u>. Washington, DC: Education Development Center, 1995.

Bakhtin, M. M., <u>Problems in Dostoevsky's Poetics</u>, edited and translated by C. Emerson. Minneapolis, MN: University of Minnesota Press, 1986.

De Vaney, A. & Butler, R. P. , "Voices of the Founders: Early Discourses in Educational Technology." In D. H. Jonassen (Ed.), <u>Handbook of Research for Educational Communications and Technology</u>. New York, NY: Simon and Schuster Macmillan, 1996.

Driscoll, M. P., <u>Psychology of Learning for Instruction</u>. Needham, MA: Allyn & Bacon, 2000.

Hilgard, E. R., <u>Unconscious Processes and Man's Rationality</u>. Urbana, IL, 1948. (as quoted in De Vaney and Butler, 1996).

Pais, A., <u>A Tale of Two Continents: A Physicist's Life in a Turbulent World</u>. Princeton, NJ: Princeton University Press, 1997.

Shotter, J., "The Social Construction of Our 'Inner' Lives." <u>Journal of Constructivist Psychology, 10</u>, 7-24, 1997. Also online at http://www.massey.ac.nz/~ALock/virtual/inner.htm.

Visser, J. (in print), "Integrity, Completeness and Comprehensiveness of the Learning Environment: Meeting the Basic Learning Needs of All throughout Life." In D. N. Aspin, et al. (eds), <u>International Handbook of Lifelong Learning</u>. Dordrecht, The Netherlands: Kluwer Academic Publishers. Also online at http://www.learndev.org/dl/LLLIntHbChapter.PDF.

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1 Any opinions expressed in this essay are entirely those of the author and do not necessarily reflect official policy of UNESCO or the Learning Development Institute.

2 This essay is based in part on a more extensive treatment included in the forthcoming *International Handbook of Lifelong Learning*, Aspin, Chapman, Hatton and Sawano (Eds), in the chapter on *Integrity, Completeness and Comprehensiveness of the Learning Environment: Meeting the Basic Learning Needs of All throughout Life* (Visser, in print).

3 One explicit definition goes back to Hilgard (1948). It states that "learning is the process by which activity originates or is changed through training procedures…as distinguished from changes by factors not attributable to training" (p. 4). De Vaney and Butler (1996) underline this definition's influence on the behavioral school. It is only quite recently that this close linkage with instruction starts to disappear. Driscoll (2000, p. 11), for instance, stresses, with reference to her analysis of different learning theories, that "they do share some basic, definitional assumptions about learning. First, they refer to learning as a persisting change in human performance or performance potential." However, distinctly different from Hilgard's definition, she continues to say that "Second, to be considered learning, a change in performance or performance potential must come about as a result of the learner's experience and interaction with the world." This clearly places the idea of learning outside the individual learner.

4 See http://www.learndev.org/LearningStories.html. The Learning Stories Project is continuing beyond the limited scope of the workshop in which it started. Interested readers may want to contribute their stories by following the guidelines provided at the referred website.