

Where are you based?

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WHENCE COMETH SUCH APPREHENSION?

This chapter is about the Learning Development Institute. I shall present and describe it here as an instance of institution building inspired by the need of scientists to engage in collaborative transdisciplinary pursuit.

People who are unfamiliar with the Learning Development Institute often ask me: “So, where are you based.” When LDI, short for Learning Development Institute, was still in its embryonic state of development rather than in its infancy, which is its current reality, I used to be slightly embarrassed by the question and would typically find myself looking for some kind of fancy answer that would make the fledgling institution appear more real than people might otherwise be inclined to believe. Whence cometh such apprehension?

Despite the advent of the World Wide Web, we still live in a world in which walls mean a great deal, not just for protection, but particularly to assert one’s validity and power. Institution building in the world of science actually runs behind developments in the commercial sector. The pioneering efforts of such Web-based operations as amazon.com have borne fruit among members

of the commercial community. Amazon is now but one of many similar events that are seen to be valid providers of products and services via the Internet. The absence of physical infrastructure other than the bare necessary--warehouses in Amazon's case--seems no longer to be a serious issue for the public. An operation like eBay is even less real in terms of physical presence. Nonetheless, it generates a tremendous amount of commercial traffic and, again, the users put trust in the system, particularly as they can themselves contribute to validating sellers and buyers. The story is different, however, for the scientific enterprise.

The Internet, particularly the World Wide Web, has significantly influenced the way in which we conduct science (e.g. Lucky, 2002). Yet, it has had a far lesser influence on the way in which we organize ourselves *institutionally* for the purpose of doing science. While in some cases, such as in experimental high energy physics, the building of solid infrastructure is unavoidable, in other areas, such as in much of the social sciences, infrastructure often adds unwillingly to the burden rather than being an asset. It is thus desirable to explore alternatives that make the development of science less dependent on infrastructural conditions and there is particularly a need to look at possibilities to enhance the development of science by stepping outside the boundaries, including the physical ones, that keep things unduly in place, i.e. under the control of social forces that frustrate innovative thinking and the exploration of uncharted terrain. Doing so in a world in which ivory and other towers still dominate the landscape is a challenging enterprise, whence my apprehension during the early days of LDI. What follows aims at underlining that such enterprise is worth the effort.

From an institutional organizational perspective, the Learning Development Institute is a novel reality in the world of exploring the essence of who we are and what the universe is to which we belong, i.e. the world of science. The fact that the Institute has no walls is not entirely accidental to the stated mission of LDI to be “a transdisciplinary networked learning community devoted to excellence in the development and study of learning” (Learning Development Institute, 2003.), nor is it alien to LDI’s emergence from less successful earlier attempts to develop the idea that learning has no borders within the boundaries of a traditionally organized framework, that of UNESCO, the United Nations Educational, Scientific and Cultural Organization (Learning Without Frontiers, 1999).

LEARNING: A TRANSDISCIPLINARY HUMAN ACTIVITY

In October 1993, French philosopher Michel Serres, member of the *Ad Hoc Forum of Reflection on UNESCO’s Role in the Last Decade of the Twentieth Century*, an advisory group to the Executive Board of the United Nations Educational, Scientific and Cultural Organization, coined the notion ‘Apprendre sans frontières’ (Learning Without Frontiers, or LWF for short), which subsequently became the name of a transsectoral UNESCO program aiming at slashing the barriers surrounding human learning (UNESCO, 1995). The initial concerns underlying the program had to do with the acute lack of opportunities for large proportions of the world population to have access to educational opportunities of any reasonable quality. The presence among the 6,000 million planetary citizens of some 800 million illiterates and the existence of

roughly 130 million children, especially girls, in the primary school age who do not go to school explain and justify these concerns.

Not surprisingly, initial efforts of the team responsible for turning LWF into a reality had their primary focus on easing the problems referred to in the previous paragraph through such options as distance education, the use of digital technologies, satellite communication and the Internet. The aim in doing so was to lower the barriers of space, time and age, as well as to address circumstantial factors such as geopolitical divisions; institutional rigidity in allowing access to opportunities and facilities to learn; unequal access to financial resources necessary to get entry to such opportunities and facilities; and socio-cultural forces that often drive large groups of people – e.g. women in a variety of countries and generally minority groups – into marginalization. ‘Getting an education’ then becomes much more difficult for such groups.

To the last category of barriers mentioned above, those due to circumstance, belong also (see UNESCO, 1995) the barriers that relate to the “compartmentalization of knowledge into well defined disciplinary areas, [which] restrict learning as they discourage the mind from traveling between and beyond them” (p. 2). A related barrier is fashioned by the mind itself in that “the mind sometimes creates its own restraints and stereotypes that limit our vision” (p. 2). In fact, the former of these last two barriers can be seen to be a special case of the latter. We create certain thinking habits and do so for a purpose. Dividing the enterprise of building knowledge, i.e. the business of science, up into disciplines and forcing those who want to contribute to that enterprise into a disciplinary mode of working, thinking and belonging, is an exercise of the collective mind.

Of course, the move to establish disciplines has greatly contributed to the development of science. However, it has also led to putting an arbitrary limit around the kind of problems that will be investigated and those that will – or according to some, should – not be taken on.

The question, ‘Where are you based?’ when asked among scientists, is normally formulated in terms of ‘What field are you in?’ Being able to give a clear answer to that question provides comfort to both the respondent and the person who asks the question. Not being able to give a convincing answer is easily interpreted as a sign of being a less serious contributor to human knowledge. In fact, scientists are generally not judged by how they contribute to human knowledge as a whole – or, perhaps more meaningfully, by how they enhance human existence – but by the extent to which they ‘contribute to their field.’ If their role is important they are said to ‘stand out in their field.’ Occasionally, someone may be referred to as having contributed to several fields, but there are no award systems in place yet for those who excel in venturing beyond whatever fields there may be, those who make it a habit of their scientific being not to be bothered by the boundaries of such fields. While saying this, I note that the phenomenon of moving outside one’s field into another field seems to be more frequent, and to be perceived with relatively more positive appreciation, among physicists, which is a sign of hope. This more liberal attitude may be understood considering the not entirely unjustified perception among physicists that the understanding of the phenomena studied by other disciplines ultimately derives from the laws of physics, or, as Abragam (2000) says, that physics is “the cornerstone of all scientific disciplines that describe the essence of the world in which we are immersed, including ourselves” (p. 9).

Indeed, historically, the desire to find a unified theory, a theory of everything is strongest represented among physicists.

But I digress. I was trying to argue that learning is in essence a transdisciplinary phenomenon and that this particular attribute explains, in retrospect, why Learning Without Frontiers had difficulty coming to fruition in a laudably multidisciplinary environment like that of UNESCO, where the transgression of boundaries and interaction among the fields separated by those boundaries is quite common. Seemingly paradoxically, though, such transgression does not mean overcoming the boundaries. Quite to the contrary, living so closely together on different sides of a boundary enhances the sense that the boundary is important, if alone to ensure that budgetary resources meant to be for one sector should not benefit another one. I do not agree, therefore, on the practical grounds I just mentioned, with a recent claim by Novotny (2003): “Transdisciplinarity is...about transgressing boundaries” (p. 1). Essentially, in my view, transdisciplinarity goes beyond transgression, making transgression an irrelevant issue. It is thus significant that Novotny adds: “Institutions still exist and have a function. Disciplines still exist and new ones arise continuously from interdisciplinary work. Therefore: beware!” (p. 1). In fact, the author poorly distinguishes in this assertion between interdisciplinarity and transdisciplinarity. Moreover, she contradicts herself. If transdisciplinarity were really about transgressing boundaries, then why should one beware of what results from the transgression? If the transgression resulted in a new discipline or a new institution that still has the same essential characteristics as the disciplines and institutions from before the transgression, one has not really moved beyond where one was.

WHENCE COMETH SUCH KNOWLEDGE

Often, the limits we put around an object of study – for the obvious purpose of making studying the object a manageable undertaking – are also the cause why, after a certain depth of investigation has been reached, no further advances are made. When that happens, it is time to take a few steps back and look at where we came from, what has been achieved and what were the underlying assumptions of that achievement. Becoming conscious of a field of study in its historical, epistemological and sociological perspective is a prerequisite to developing a vision for how to move beyond the frontier that has been reached, to transcend the discipline. If, in such a retrospective view, for instance, we find that most of our work has been inspired by a binary logical framework that excludes the possibility of a third alternative to truth and falsehood, then there is every reason, as Nicolescu (2002) argues, to ask ourselves what benefits might be derived from breaking that framework open and consider the possibility of permitting a third alternative to be included, rather than excluded, from our habits of mind. In general, what I am saying here is that for the advancement of science beyond the frontiers it has reached at a certain point in time, one needs to engage in a scientific reflection on science itself. This is often a task of utopian dimensions, as Bourdieu (2001) explains, at least as long as such reflection is conceived of as something that should be engaged in by isolated individual scientists, for

how can one combine the very advanced technical and scientific competence of the researcher working at the cutting edge of his or her field, who doesn't have the time to analyze, with the equally very advanced analytical competence that goes with the disposition required to put that

analytical competence at the service of a sociological analysis of the scientific practice? (p. 18)

Clearly, what is required here is a comprehensive team approach towards meeting the mammoth task ahead of tracing the map of how we arrived at the knowledge we have and what the meaning of that knowledge is as a function of our perceptions of who and what we, humans, are. That map may then be used to make better informed choices as to where to go next and how to get beyond the boundaries of the epistemological and sociological frameworks that have helped us advance, but that are now holding us back.

DEVELOPING LEARNING BEYOND ITS CURRENT MEANING

During a symposium, jointly organized by UNESCO and the Learning Development Institute, the latter still *in statu nascendi*, at the 1999 Annual Meeting of the American Educational Research Association in Montreal, Canada, a multidisciplinary panel of researchers and thinkers grappled with questions concerning how to advance the science of learning and move it beyond its current frontier (Visser, et al., 1999, April). The event followed five years of efforts to advance the idea of Learning Without Frontiers, driven by all the right intentions, but increasingly frustrated by the growing recognition that we first needed to know in depth *what learning actually was* before we could advance in a way that would make sense. This led to the idea of the Learning Development Institute as a networked effort to bring clarification on this issue at a level higher than the one we were working at within the perspective of LWF's practical considerations and higher than the one at which most other institutions engage with the subject from one or another disciplinary angle.

Reflections on that practice called for a broader definition of learning than the one that conditions most educational research and that drives most of the efforts to develop human learning. One was proposed (Visser, 2001) that redefines learning as a disposition and that links it to the overriding purpose of developing the ability to interact constructively with change. This goes beyond the common definitional idea that learning is “a persisting change in human performance or performance potential” (Driscoll, 2000, p. 11). The latter conception works fine as an operational definition as long as one considers human beings as entities whose competencies can be plugged into and out of performance systems that serve some predetermined social or economic purpose. The underlying assumption is a utilitarian one. Human competencies are created so that they can be used in accordance with the demand of performance systems that largely remain beyond questioning by the individuals who respond to the demand. While parts of the workings of human society follow such a model, humanity as a whole does not and should not, whence the proposed definition offers a broadening of vision that allows human adaptive behavior to be studied in an essentially ecological perspective rather than from a utilitarian point of view.

The broadening of the definition allows a wider community of scientists to gather around significant issues of shared concern. The extent of this chapter does not allow going into detail about the communities created and the issues explored by them. Interested readers can, however, get a good feel of the broadness and newness of what is happening by exploring on the LDI Web site (www.learndev.org) the various areas of activity and events, looking for instance at the work underway by the Book of Problems community of scholars (www.learndev.org/BOP-

AECT2002.html) to define what we do not know about learning or the work done in the framework of the Meaning of Learning (MOL) focus area (www.learndev.org/MoL.html). These are but a few examples.

The more important point here is that the aforementioned broader perspective on learning is required to start thinking about learning beyond the naïve notion that learning coincides entirely with what we do in school and school-like situations. To the extent that the school and school-like contexts play a useful role in facilitating learning – and not everyone is convinced of that usefulness – the discipline that historically evolved around that notion finds itself at a crossroads. The challenge to look beyond the school derives only in part from the emergence of technological opportunities that make traditional school structures obsolete. In fact, many of the technological innovations, such as e-learning, tragically mimic the traditional structures they replace, often repeating existing shortcomings and worsening them in a technologically enhanced manner.

The real challenge comes from the need to redefine the development of human learning in the context of the problems faced by a world citizenry that is more and more becoming a planetary society. The members of that planetary society, be they individuals or organized communities, confront problems of planetary dimensions and impact. Such problems require individual and social consciousness to be developed at a higher level than ever before. That challenge forces the eggshell around what currently still is the science of learning to be broken so that the community of researchers, practitioners, thinkers and policy makers who are willing to face the new challenge can move to the next level of dealing with the reality of human learning in a world that, some

12,000 years after the introduction of agriculture, is seeing the planetary consequences of human intervention in the workings of nature. LDI represents a modest attempt at facilitating the process of breaking the disciplinary eggshell.

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