A New Model for Self-Instruction in Continuing Education: the referatory of global open educational resources.

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As we witness the rapid acceleration of changes in the workplace, led by technological advances and the need for the constant upgrading of the workforce, it is possible to conceive of an educational center which offers a refreshing new model based on an idea in communications: a "pulling effort" on the part of the learner rather than the "pushing effort" on the part of the teaching institution.

It appears that essentially all productive sectors of the modern economy (industry, agriculture, health, education, among others), will be adopting similar operating innovations such as automation, artificial intelligence, analytics and others, making it ever more feasible to imagine an easier migration of workers from one sector to another as opportunities diminish in some sectors and develop in others. To return to the conventional classroom to learn the necessary knowledge, competencies and attitudes, in "hard" and "soft" varieties, required by the new workplace, is a dismal perspective for the motivated learner: curricula which bundle uninteresting content along with the interesting; extended "classroom seat time"; commuting costs, if the learning is done face-to-face; and a pace of knowledge-acquisition which may be too slow for the able learner.

Simultaneously, as we look around the world, we observe the production in schools, universities, ministries, companies, syndicates, non-

governmental entities and even independent professional educators, of Learning Objects (LOs), or digital content for online learning in a variety of media types: texts, videos, audios, images, graphics, computerized simulations, in large and small sizes (lectures and courses), and adaptable to any theory of learning. When ready to be disseminated on the web, they are encased in Open Educational Resources (OERs), as a kind of "protective travelling box," and containing metadata which permit cataloging the subject of its content. To be called an OER, the box and its content must be in open format (images in PNG, video in WebM, web pages in HTML), and be either in the public domain or bearing an open license (of the Creative Commons type), in order to be reused, retained, revised, recombined or distributed freely, as long as there is attribution given of the original source and no commercial use made.

Created on all five continents, these LOs and OERs represent the new "bricks" with which learners can construct the "edifices" of their own individual knowledge-bases. What is required now is that there be created, scattered around the world, "referatories" which themselves do not hold the voluminous contents of the OERs, but rather offer digital links to the "repositories" containing the LOs.

Dedicated to their special sectorial interests (industry, health, education….), each referatory will have a staff responsible for identifying, on a global scale, relevant LOs, their quality, educational level (introductory, intermediary and advanced), their open-access status, and their pertinent metadata in order to catalog each one appropriately, with the link to its source, in the referatory´s collection.

The responsibility of the translation of the OER´s content from abroad into the language of the learner must be placed on the learner so as to maintain the overall content of the referatory reduced and in a workable dimension. Automated and gratuitous web-available apps such as Google Translate and iTranslate have shown themselves to be adequate for this task.

Organizations creating referatories will have to make decisions concerning the operations, policies and practices which are appropriate to their local laws and customs. These include such considerations as:

--will access to the collection be limited to certain classes of users or not?

--will access to the collection require payment of any kind?

--will there be any kind of certification-of-knowledge option for users of the collection (requiring an online or face-to-face) exam, special fees, use of physical or virtual issuance of certificates, badges or other form

of nano-certification?

--will there be an opportunity for the creation of "communities of learning" or "communities of practice," permitting interactivity and socialization in virtual space among the learners interested in the same subjects?

--will there be forms of guaranteeing privacy of the subject-searching on the part of learners? Certainly there should be a continuous register of the searches to attend efficiently the using public; but, depending on local culture, removing the identity of the user, whether corporate or an individual, after s/he withdraws from the system, is an important issue;

--what system will be used to verify periodically the continuing availability of the selected and cataloged links since, on a global scale, there is often a removal or change-of-location (URL) or other identifying information of linkable sites;

--what would be the most appropriate, among the many that exist, form of periodically measuring the impact of this new approach to continuous adult learning, so as to assure that the targeted productive sector has it´s demands for information and worker training anticipated with educational resources, culled from around the world, and readily at hand?

Those responsible for the collection of OERs offered to the sector will have to regularly calibrate and adjust the rate of acquisition of new information for the collection, constantly improve the accuracy of metadata cataloging, monitor the communities of learning and of practice so as to identify special new needs of the user universe, and increasingly extend the global search for heretofore unknown sources of useful and appropriate information, knowledge and know-how.

In this way, a slim, trim information/training center, operating basically with resources obtained from the web, can be sustainable, reliable to its users, and of strategic importance to the productive sector community it is intended to serve.

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