

CEBEM's Experience in Promoting Innovation in Professional Development and Graduate Training

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Abstract

The Centro Boliviano de Estudios Disciplinarios (CEBEM) is a network that translates research results and practitioners' experience into online learning opportunities and constructs North and South communities of knowledge and practice. This paper highlights how CEBEM has overcome challenges of distance, language, affordability and internet access to facilitate a wide array of professional development courses throughout Latin America using email, e-newsletters, Moodle and other social networking tools. CEBEM's partnership with Canadian academics and graduate students also offers a promising practice of South-North cooperation and learning and connecting academics with development practitioners.

A) Introduction

This document discusses the vision and practice of the Centro Boliviano de Estudios Multidisciplinarios (CEBEM), a research centre that translates research results and practitioners' experience into online learning opportunities and constructs North-South communities of knowledge and practice. CEBEM's mission is to create new democratic and participatory models of learning that improve information and reflection. CEBEM has used Information and communication technologies (ICTs) since the early 2000s to build dialogue between social scientists, professionals in diverse development fields, public and private institutions, and social actors.

CEBEM initially provided training programs as part of graduate programs and diplomas organized by the Universidad Mayor de San Simon (Cochabamba) and the Latin American Faculty of Social Sciences (FLACSO) in Ecuador. It first launched a virtual platform as a means of organizing an online master's program; however, in 2002, CEBEM decided instead to focus on updating professionals via online courses for individuals working in community forestry while continuing the delivery of in-classroom courses. Over the years, CEBEM has developed a portfolio of courses on different topics and as of today (February 2012), more than 2,438 professionals have taken CEBEM's courses.

CEBEM found early on that there was a strong demand amongst development practitioners and professionals for continuing education because they work within numerous communities of knowledge and practice that are not sufficiently connected to higher education institutions. A potential demand appears to exist for short-term courses for professional updating in Latin America (LAC) because (1) available information indicates that hundreds of thousands of students graduate each year from higher education institutions in the region (Table 1); (2) higher education institutions are focused on graduating people, not on updating of

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professionals; (3) there is scarcity of online courses to fulfill punctual knowledge needs of professionals in many disciplines; (4) there is the opinion obtained repeatedly from diverse institutions and academics across the region that graduates have very limited or no opportunities for professional updating; and (5) there is persistent demand for CEBEM's online courses. Despite there not being any statistical data about demands for professional updating and no articulated demands coming from various professional sectors, these observations support the notion that there is a niche for meeting the potential demand for knowledge updating in varied topics, and that this demand comes from professionals and practitioners who work on development issues in local and national governments, non-governmental organizations (NGOs), grass-root organizations (GROs), and development programs and projects.

| TABLE 1 Latin America and the Caribbean: First-Level University Graduates | | | | | | | |
|--|----------------|----------------|------------------|------------------|------------------|------------------|------------------|
| First level university graduates | 1995 | 2000 | 2001 | 2005 | 2006 | 2007 | 2008 |
| Agricultural sciences | 22,287 | 25,701 | 26,152 | 33,382 | 36,917 | 41,456 | 44,091 |
| Humanities | 41,904 | 56,018 | 61,574 | 100,837 | 113,013 | 118,091 | 125,595 |
| Engineering & Technology | 114,466 | 159,535 | 175,081 | 212,461 | 225,961 | 252,864 | 253,485 |
| Medical Sciences | 90,759 | 123,727 | 131,799 | 183,423 | 204,895 | 224,558 | 262,815 |
| Natural & Exact Sciences | 30,739 | 48,615 | 51,071 | 83,481 | 88,066 | 89,180 | 96,623 |
| Social Sciences | 392,567 | 559,486 | 607,457 | 895,117 | 925,563 | 954,450 | 1,011,236 |
| Total | 692,725 | 973,084 | 1,053,136 | 1,508,703 | 1,594,417 | 1,680,601 | 1,793,847 |

Source: Red de Indicadores de Ciencia y Tecnología. <http://www.ricyt.org>

B) Objectives of CEBEM's knowledge management (KM) strategy

The mission of CEBEM is to arrange and build knowledge and democratic information systems that articulate local wisdom with global expertise to improve development interventions. To fulfill this mission, CEBEM connects diverse national and international actors (stakeholders) to mobilize knowledge, strengthen social capital, and generate synergies between different knowledge sources. CEBEM believes that virtual horizontal and collaborative learning networks can help institutions, development actors and individuals more effectively manage knowledge.

CEBEM's KM strategy has the following objectives:

- 1) **updating professionals:** online courses are aimed at providing over a short period of time, specific knowledge to development professionals or practitioners on topics on which CEBEM and its partners have expertise;
- 2) **South-South and North-South mutual learning** based on the application of constructivist pedagogy for knowledge creation that consists in learning by interacting among equals;
- 3) **opening opportunities for upgrading graduate training;**
- 4) **strengthening the dialogue** among professionals, practitioners, and members of NGOs and GROs by organizing virtual forums to identify training, research, and policy priorities; and,
- 5) **promoting communities of knowledge and practice** through free access to self-administered websites, a newsletter, a virtual journal (REDESMA), a virtual library, and databases.

C) Role of Virtual Platform

CEBEM's virtual platform (VP) operates as a 'structuring' framework for teaching, learning, information, and communication activities. It is a space where professionals and practitioners interact *via* courses, forums, databases, virtual libraries, and self-administered web sites.

The VP integrates tools such as email, FEDD-RSS, Facebook, Twitter and Skype. However, e-mail is the primary distribution channel for the newsletter, courses, and organization of forums. Skype is used for bilateral discussions or meetings among a few persons. Face-to-face contact is rare due to the high cost of travel across the region. Internet-based tools have been improving so much that visual contact – although limited – is easy to obtain, therefore making face-to-face contact less necessary.

CEBEM's strategy is to use virtual tools that are as simple as possible in order to reach as wide an audience as possible. Our target beneficiaries do not always have access to a personal computer and a private Internet provider; in many cases, they have to use facilities available at the working place or Internet cafés. More sophisticated tools such as electronic conferences have not been used because the technology is expensive and because institutions with this facility are relatively few in LAC and located mainly in major urban centres.

D) Functions of Virtual Platform

The VP fulfills three functions:

1) Teaching and learning is accomplished through online courses for professional development and the organization of virtual forums.

All of CEBEM's courses are 'non-credit' and, therefore, rely completely on the interests of "participants" (NB: not 'students'). This is congruent with the learning philosophy because courses are given to participants who are already professionals who are some times only interested in participating in the discussions or looking at the materials. So CEBEM offers them the option of earning a Certificate of Approval (if they complete the exam) or a Certificate of Participation (if they participate in the activities only).

Producing short courses for "front-line" professionals provides a 'reality-check' for academic discussions, curriculum development, research proposals, and policy interventions. The participants come from diverse disciplines, organizations, countries and cultures, and bring years of experience. As such, CEBEM treats the participants and facilitators (NB: not "teachers" or "instructors") as equal co-learners.

Other characteristics of courses are the following:

- **short duration.** Maximum of seven weeks, including a week devoted to learning how to navigate in the platform environment;
- **close follow-up of participants;**
- promoting **active exchanges and dialogue** among participants; and
- **no course is free:** a minimum payment of US\$ 50 is required in order to ensure commitment with the course' obligations. The usual fee is US\$ 200; many times a US\$ 50 discount is given.

A standard CEBEM course has six modules, one per week. One or two weeks are devoted to forum discussions among participants. Every week, the facilitator proposes a topic with a bibliography and a number of questions for discussion, and/or a short homework assignment. At the end of each week, the instructor makes a summary, and assistant tutors follow up by e-mail with participants who do not show up in discussions or are delayed in homework. Although labour intensive, the presence of an instructor and tutors is a key to the courses' success.

Facilitators are usually professionals or university professors with recognized reputation on the topic or Canadian graduate students who were selected through open competition or selected by professors.

The virtual forum format has been useful to overcome geographical distances and language barriers, and to exchange knowledge and experiences. One example is the virtual forum on "Aboriginal/Indigenous Community Economic Development", a forum led by CCEDNET and CSCD-SFU that resulted in nine publishable case studies from Canada, Bolivia and Ecuador. Another case is the virtual forum on "Training on Intercultural Communication in the Work Environment: Latin America–Canada–USA–UE–Asia", which attracted the participation of over 460 persons from 14 countries of LAC and beyond. The forum produced rich material including proposals and experiences of interest to future courses and research projects.

Another forum on "Self-determination and Indigenous Autonomy in Latin America and Canada", led by a professor from York University, resulted from an online course on the same topic. More recently, a forum was organized on "Social and Solidarity Economy: building a common understanding", which identified over 20 on-going experiences and policy discussions among practitioners and experts.

2) Free access to sources of knowledge

CEBEM has gradually developed a free-access directory of experts, with special attention to graduate training programs, regional networks, and research programsⁱ. It also includes a Canadian component that serves as a hub to Canadian sources of knowledge.

CEBEM uses databases in combination with other pedagogical tools for production and delivery of courses. It provides free access to its virtual library and links to many other online libraries, although free access to them is not always availableⁱⁱ.

3) Communication

The REDESMAⁱⁱⁱ national newsletter was created by CEBEM in 1997. It soon became a very popular resource for advertising diverse professional and academic activities inside Bolivia. Currently, the newsletter also includes news about Canadian activities. The newsletter is translated to English and Spanish using Google translator.

Typically, a newsletter is a means to provide information about the issuer. However, CEBEM sees REDESMA as a tool of information management and dissemination about different events conducted by networks, universities, agencies, NGOs, governments and any other actor interested in development. It is a constantly evolving space through which information circulates. REDESMA constitutes a valuable resource for diverse communities of practitioners and a very powerful tool for advertising activities of LAC as well as Canadian courses and forums.

Using VP tools to fulfill these three functions has permitted CEBEM to approach and support geographically dispersed communities of knowledge and practice. A community of knowledge (or knowledge community or community of knowledge and practice) is defined as a group of people (professionals, professors, and practitioners) interested in knowing about a problem, how to deal with it, and in learning together and from one other. These communities are fluid and not tied to particular processes of institutionalization. Participants can become acquainted and build these communities through multiple channels: they can join networks, subscribe to journals and reviews, read books and reports, participate in advocacy activities, etc.

Currently, ICTs allow these communities to become virtual and globally accessible. In CEBEM's experience, online communities of knowledge and learning communities exist but as loose systems of knowledge exchanges among people that fluctuate in intensity depending on discipline, topic, timing or practice. These communities could be detected through courses and forums. By organizing online forums, CEBEM was able to contact people, learn about their interests, and identify topics of interest for mutual learning. The system of pre-registration in CEBEM's online courses^{iv} made it possible not only to know about potential demand but also to find individuals from diverse disciplinary and institutional backgrounds who were interested in the subject matter of courses. These 'populations' are now accessible through virtual mass communication means (e.g. newsletter).

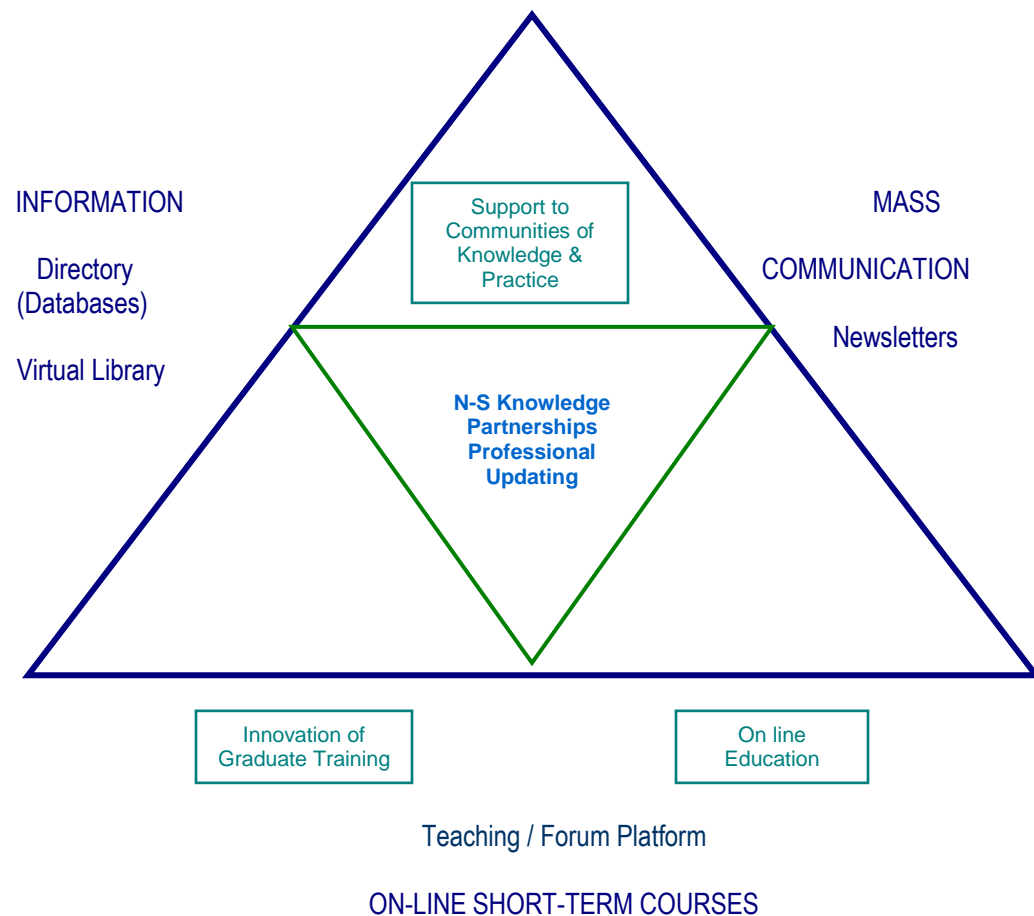
E) IDRC Canadian Partnerships support to Virtual Platform (VP)

IDRC's Canadian Partnerships (CP) provided support between 2007 and 2011 for Phases I and II of the project "North-South Knowledge Partnerships: Promoting the Canada-Latin America Connection". CEBEM and six Canadian partners conducted this initiative to test the "Cooperation, Knowledge and Development" (CKD) model.

The CKD 'Structuring Model'^v was formulated with three elements (Figure 1):

- a. *a philosophical orientation towards collectively building knowledge and participative learning*. The model looks at structuring the relationships among individuals supported by a system that combines a virtual learning platform, a portal with information resources (databases), and communication tools (newsletters);
- b. *two inter-connected objectives: North-South and South-South Knowledge Partnerships, and Professional Development and Updating*. The model proposes to convene Canadian (North) and LAC (South) members of universities, research centres and NGOs, with the purpose to respond to the demand for short internet-based courses for professional development;
- c. *the combined use of three virtual tools: online short-term courses, databases and virtual libraries, and mass communication newsletters*.

FIGURE 1 THE COOPERATION, KNOWLEDGE & DEVELOPMENT MODEL (CKD)



Phase II was to promote and further develop the VP to support North-South knowledge partnerships based on participatory and constructivist management of information and e-learning pedagogy. Specific objectives were:

- to consolidate a model of collaboration supported by a Portal that provides tools and resources for communities of knowledge and practice;
- to enhance and promote collaboration for the design and delivery of short online courses for professional development; and
- to provide short-term learning opportunities to Canadian and LAC graduate students, professors, and practitioners^{vi}.

The beneficiaries included: individuals and institutions engaged in, or interested in experimenting with knowledge communities and communities of practice across geographic, disciplinary, and occupational boundaries; and professionals and technical personnel interested in expanding or updating their knowledge and skills. Training of graduate students and professors received special attention.

F) Evolution of the Virtual Platform

In many of the communities in which CEBEM's participants work, not everybody has the possibility to attend the physical classroom due to constraints of distance, work schedules, and income. The need to make higher education more democratic by overcoming time and space limitations was identified in the early 2000s as a result of collaboration between CEBEM and the Universitat Oberta de Catalunya (UOC-Spain). CEBEM has therefore moved away from the production and delivery of traditional in-classroom courses, diplomas or graduate studies and instead toward online education.

CEBEM's early work benefitted from the support of the Centro de Estudios Superiores Universitarios (CESU-UMSS) de Cochabamba, the Centro de Estudios de Economía Humana (CLAEH – Uruguay) and the Instituto de Ecología de la Universidad Mayor de San Andrés. This support expanded in 2007 with the partnership of Canadian centers linked to the CKD project.

Over last 8 years, five programs have consolidated – Sustainable Development and the Environment, Local Development, Intercultural Relations, Online Education, and Human and Social Development (Table 2 on p. 15).

CEBEM initially produced its own VP for course delivery in 2002; but later on, this VP was replaced by a Moodle platform because it was more popular, complete and accessible.

CEBEM then developed the following five tools to complement the VP:

1. **REDESMA newsletter** is a very popular resource and the main instrument for advertising diverse professional and academic activities inside Bolivia. Over time, its subscriber base has expanded to reach 140,000 in the Andean region and beyond.
2. **CEBEM's virtual library**, developed in the last 10 years, provides free online access to about 23,000 electronic articles organized in five areas (i.e. economy, social issues, political science, environment, and intercultural relations). It has also information about 100 other libraries, although their catalogues and electronic articles are not necessarily available.
3. **The Directory (database)** began with the registry of specialists in environmental topics and gradually expanded in the CKD project to include Canadian specialists, research centres, training programs, newsletters and other sources of knowledge that were scattered across various unconnected websites^{vii}.
4. **The virtual Journal REDESMA**^{viii} was created in 2007. It has published 12 issues with free online access; it has had so far over 93,600 visits. It serves as support to people in the community of knowledge and practice on Sustainable Development & the Environment.
5. **Platforms for Communities of Knowledge**. In 2008, CEBEM created two self-administered platforms to support knowledge communities: "Learning for Conservation" (Red de Aprendizaje para la Conservación (RAC))^{ix}, and "Intercultural Relations"^x. "Learning for Conservation" receives hundreds of visits each month and logged over 9,000 visits in its first year of existence, while Intercultural Relations has received over 38,000 visits over its first two years of existence. CEBEM feels that these resources are still not used sufficiently for the benefit of their knowledge communities.

G) Specific Outcomes

CEBEM's organizational strategy initially emphasized developing a VP that embraced the tools mentioned above. In turn, this attracted the participation of Canadian partners in the CKD project – the Centre for Intercultural Communication (CIC-UBC), the Centre for Research on Latin America and the Caribbean (CERLAC-York U.), the Centre for Developing-Area Studies (CDAS-McGill U.) later known as the Institute for the Study of International Development (ISID), the International Secretariat for Human Development (ISHD-York U.), the Centre for Sustainable Community Development (CSCD-Simon Fraser U.) and the Canadian Community Economic Development Network (CCEDNet).

The VP's development also allowed CEBEM to serve as hub for three networks:

1. The Red Iberoamericana de Postgrados sobre Políticas y Estudios Territoriales (RIPPET^{xi}) is a network made up by some 40 graduate training programs from Mexico, Colombia, Argentine, Spain, Uruguay, Chile and Brazil; CEBEM operates as its General Coordination;
2. Red de Desarrollo Sostenible y Medio Ambiente (REDESMA^{xii}) has been working since 1999; it delivers the free by-weekly REDESMA newsletter, publishes REDESMA Virtual Journal, and operates a portal for users in LAC and beyond; CEBEM has recently started publicity of REDESMA Africa^{xiii} for Portuguese-speaking countries of Africa; and
3. VertebrALCUE aims to contribute to regional integration among Latin American Higher Education Systems and to implement the Common Area of Higher Education between Latin America, the Caribbean, and the European Union (ALCUE)^{xiv} by exploring and strengthening academic cooperation.

The VP has been instrumental in approaching communities of knowledge and practice and facilitating information sharing and knowledge development. An interesting experience was the call launched by the ISHD through REDESMA newsletter for case studies to populate a global knowledge bank on women-led initiatives of social change in small and marginalized communities. The purpose of the project was to disseminate and integrate real-life experiences of women-led development experiences into development-related curricula, research and practice, service delivery and policy advice. The call was sent out in English and Spanish; 44 proposals were received from GROs, NGOs or practitioners, 35 were initially accepted and 10 were selected (in both Spanish and English)^{xv}.

Another example was the previously mentioned virtual forum on "Training for Intercultural Communication in the Work Environment", which produced an agenda of topics for online courses and a course on the topic.

Working with graduate students to produce online, professional development courses has been another important outcome of CEBEM's VP. This helped to bridge between academic knowledge and the work of NGOs and GROs. The CKD project partners, for example, provided support by connecting CEBEM with graduate students and by identifying suitable candidates among their own networks. Two self-administered short modules were used to train selected graduate students on online education and how to use a Moodle platform, along with guidelines for course production and how to complete a course model.

Graduate students prepared the materials for their courses with advice from supervising professors on teaching methods. Given Spanish proficiency requirements, most of the Canadian graduate students who taught these courses were Canadian-Latin American students who had an already established network in the region, and some experience as Teaching Assistants. However, most had limited knowledge of online teaching and little experience with teaching professionals. CEBEM staff provided them with on-the-job support and helped them tailor their courses to audiences of professionals.

H) Effectiveness and Efficiency

Because of cost, time and other restrictions, the VP has been the only instrument to conduct courses, forums and meetings. Moreover, it has permitted participants to contact people across distance and, more importantly, at any time, asynchronously. The lack of personal contact has been offset effectively through Skype video-calls.

The effectiveness of CEBEM's work with VPs can be assessed by indicators like the composition of the audience in terms of professional work and geographic location; the performance of participants; their language comprehension; the course quality and usefulness; the impact on adding value to graduate training; and, contact with communities of knowledge and practice.

1. Composition of the Participants

Data suggest that the participants' are professionals and practitioners who come from a wide range of sectors (see some examples in Table 3 on p. 16). The dominant sector in each course depended on its topic. For example, a course on energy and the environment tended to attract professionals from the private sector, while other courses that were more oriented towards social issues (e.g. migration, gender leadership, and social vulnerability) had more participation from NGOs and GROs. However, academics and researchers have not been dominant groups in any of the courses so far.

Audiences were concentrated in the Andean region. Participation from other areas like Southern Cone, Brazil, Central America and the Caribbean was limited. One explanation is that course enrolment mirrors the geographical reach of the newsletter used for course advertising. However, the geographic profile of the audience changed over time with the proportion of participants from the Andean region decreasing overall in more recent courses. On the other hand, results indicated that the project reached its target audience of development professionals and practitioners. The mechanism used to meet this goal – REDESMA newsletter – worked well, although it still needs to expand its reach.

2. Participant Performance:

Data for 22 courses delivered under the CKD project indicated that most participants performed well. Of the 717 registered participants, 539 received a Certificate of Approval and 35 a Certificate of Participation.

Expectations were exceeded in some cases. For example, a course called, "Best practices" in migration, remittances & development projects" published the participants' final papers online, which provided an important incentive to enhance interest. Another course "Social economy: theory and practice" resulted in 17 documented experiences of social and solidarity economy from Bolivia, Ecuador, Colombia, Argentina, Mexico and Mali.

Many LAC participants had difficulties reading English and thus did not benefit fully from courses delivered in English. There is no easy solution to this problem because translation to

Spanish is very costly in terms of time and resources. When possible, instructors offered equivalent or comparable reading material in Spanish. Another option that worked well was to have bilingual instructors and tutors, but this created a heavier workload for them. Few Canadians participated as students.

3. Course Quality and Utility

As for quality and usefulness, each course includes a final evaluation via a questionnaire that asks the participants to grade the knowledge of the professor, the academic coordination, the bibliography, and the course usefulness on a scale of excellent, adequate or insufficient. Responses from 61 students in a sample of six courses conducted under the CKD project rated:

- the knowledge of the instructor and academic coordination: 58% as “excellent” and 36 percent as “adequate”; and
- the usefulness, 48 percent qualified courses as “excellent” and 49 percent as “adequate”.

Another significant finding was that participants indicated that partial ‘scholarships’ facilitated their registration.

4. Using Graduate Students as Facilitators

The experience of CEBEM indicates that using graduate students as instructors is feasible even when they may not be already familiar with online education. Through this experience, they gained professional expertise, and an opportunity to learn with professionals working in the same field. It also expanded their professional skills, provided them with opportunities to test their newly developed courses, enhanced their online teaching competence, and expanded their professional and academic contacts.

Some students also reported gaining knowledge on their own research topic and benefitting from the participant group’s diverse academic background, interests, location, perspectives and maturity levels. There is no other comparable method to obtain similar results at such a low cost from such a wide audience across geographical and cultural boundaries. However, the main difficulty for the graduates was completing their work within a relatively short timeframe.

In expanding the program, the main challenges will be to have Spanish-speaking graduate students for work in LAC, and matching the research interests of graduate students in the global North with the professional development needs of communities in the global South.

In CEBEM’s experience, online courses and forums proved to be excellent means for reaching knowledge communities. Although tools and resources have been produced by CEBEM for turning ‘latent’ communities into ‘online’ communities, our experience suggests that this is not enough in itself. Rather, ‘online’ knowledge communities require facilitation and animation by recognized specialists. Individuals who are very knowledgeable of their professional, research or academic environment act as ‘magnets’. Supplying high-quality knowledge products also attracts the interest of professionals and practitioners, as does frequent communication through newsletters and websites that are designed to host activities and products of communities of knowledge.

CEBEM attempted to assess the costs and efficiency of online courses; however, it was not easy to isolate the specific course costs from the general logistic and academic coordination that was supported by development agencies like IDRC. An analysis of a sample of 18 courses produced on CEBEM’s platform found that online courses as proposed by the model^{xvi} require

partial subsidy. Costs might be recovered fully only when a course generates a high demand, as in general, the target population cannot afford fees higher than US \$150 per course. Estimates of costs on a Canadian platform were not done, but would likely be higher.

CIC-UBC similarly found that its course fees were the main obstacle to attracting LAC participants; still, they had to charge full Canadian fees because their program operates on the basis of full-cost recovery^{xvii}.

However, the costs of this sort of courses should to be measured against the longer-term impact that will result from professionals being updated or retrained, rather than in relation to full cost recovery or profit.

Another conclusion was that the costs of training graduate students could be partially or totally recovered through fees paid by participants in online courses. The online model appeared to be more efficient than other models based on 'in-classroom' or face-to-face contact. In this sense, the 'profit' of the model consists in the fact that (1) it is less expensive than bringing the same number of participants (270-360) from different countries to an "in-classroom" program, and (2) it can generate a small income for graduate students.

Therefore, the real issue is *how* to obtain a subsidy. One option is to solicit support from a donor; another option is to explore asking for subsidies from the private sector. Given that these courses are inexpensive compared to standard courses, and that these courses may cater to the needs of private-sector companies or civil society organizations, this is promising.

I) Future Changes

More work is still needed to develop a sophisticated course methodology that uses databases and virtual libraries as teaching tools, and that promotes communities of knowledge and practice. The idea is to have learning, teaching, information and communication reinforce one another. Information repositories such as databases and virtual libraries can be used by forum and course participants for discussions for instance.

Databases – as developed by the CKD project – are potentially useful to identify learning communities, organize forums, conduct consultancies, and enhance visibility, particularly if combined with a good communication strategy based on newsletters. The challenge is to overcome how people conceptualize training, information and communication as separate and self-contained activities. They need to understand that ICTs and new software developments make possible previously unimaginable interactions, synergies and complementarities between a learning platform and a variety of knowledge resources. However, current learning practices are still prisoners of former frameworks (e.g. classroom teaching modes).

Another area for improvement is how to develop a portfolio of courses that builds bridges across academic studies, research practice, and development practitioners' work. This requires more extensive consultation and discussion between academic specialists, key research centres and graduate programs, as well as with NGOs and GROs, project operators, program administrators and private-sector groups, in order to meet diverse needs of professional development. A more proactive strategy would be to rely more on open calls and organize forums through existing networks in the global North and South.

Promoting collaboration to adapt and deliver short online courses from North to South (and vice versa) also needs attention because Northern audiences – except those interested in specific

LAC issues – may not be interested in professional development courses aimed at a Southern audience. On the other hand, Northern courses fees are simply too expensive for people in the South, which seriously limits access.

The newsletter has proven to be an excellent means to reach LAC audiences, despite the fact that the REDESMA newsletter mainly serves the Andean countries. The main problem, however, has been to reach Canadian audiences. This would require a coordinated and sustained collaboration between Canadian and Latin American partners. Another option is to reach Canadians through existing newsletters and other channels like mutual links on websites and in newsletters.

Courses for professionals and practitioners are also helpful to assess the relevance of curriculum content and research initiatives. What in past years required travel and ‘in person’ meetings, can now be obtained in a virtual room provided that there is a good teaching pedagogy.

Our experience also indicates that involving graduate students is a promising practice. However, reaching these students is difficult because there is no regular publication of enrolled students’ names and email addresses. In this regard, we need a strategy to obtain easy and better communication with academics and graduate students in Canada and LAC.

However, information alone is not sufficient. We also need to call attention to this mode of knowledge sharing. Organizing short programs with *key university programs and centres, NGOs and networks* would permit us to gain a clearer indication of how many young graduates are interested and able to take part. It may also provide a ‘reality check’ of how to meet community needs. But, mainstreaming should not be limited to universities; it should be attempted with the NGO community given their reach and experiences with a wide variety of knowledge partnerships. A directory of NGO specialists and practitioners would complement CKD’s work with universities. However, there is no need to launch a big program; short and small demonstration initiatives may be enough.

J) Post-Forum Reflections

Knowledge and institutional experience amounts to a vast pool of intellectual capital in networks, civil society organizations and higher education institutions both in Canada and the global South. VPs are emerging as a very effective tool for mobilizing this capital across cultural, language and practice boundaries. To this end, North-South partnerships based on the efficient use of existing virtual resources create new, short-term and cost-effective ways of sharing knowledge. There is a stock of available resource material in Canada that could be relevant for professionals in the South. Beyond their publications in print and online, Canadian agencies document their program results in reports which are not always readily accessible. Canadian NGOs have documented rich experiences, which are not always shared beyond the local communities where they work. Private-sector experiences are even less known. Journals contain materials useful for professional updating, but are often inaccessible to professionals in the South due to high subscription fees. Short training programs designed using ICTs could create a different situation and make all these resources widely available.

Reaching new audiences of academics (‘thinkers’) and practitioners (‘doers’) is now much more feasible than before. VPs provide a multidimensional knowledge ‘space’ that traditional printing materials could not, and many tools, with varying degrees of sophistication, are available to suit the capacity levels of specific groups of users, particularly in LDCs. Partnerships between Canadian online learning programs and Southern ones would be a way to give professionals in

the South access to selected materials and help them overcome the obstacle of high fees. Through easier access to such materials, volunteering programs could learn from experiences beyond those lived by specific individuals or communities. VPs have the potential to be the window which makes all this work visible as experiences are translated into short online courses provided simple links are established with academic centers.

Taking full advantage of the potential of VPs will require additional research on how to better reach and expand audiences, how to cross-fertilize VPs, how to specialize or combine VP roles as producers or brokers of knowledge, how to identify and meet knowledge needs of development professionals, and how to improve the North-South and South-South dialogue. There is also a need to prevent the overlapping of activities and creation and maintenance of web resources in the Canadian NGO environment, among networks and within research institutions. It is no longer necessary to house knowledge in physical spaces restricting access to those without physical access. Knowledge can now be mobilized through VPs and in theory can be accessible to all. Knowledge partnerships can be used to create pools of resources. I

Leadership and a road map will be needed. To obtain both will require donor agencies to fund breakthrough initiatives, think tanks to foresee substantive ways to make new technologies work, the concurrence of the young generation of academics, professionals and practitioners who are more open to innovation and experimentation, and specially the participation of potential beneficiaries at the community level. These are increasingly becoming more 'interlocutors' rather than 'recipients' of knowledge. Through bringing more diverse tools and partners together, these initiatives can considerably increase synergies and develop momentum.

| Table 2 CEBEM Courses 2005 – 2011 | | | | | | | |
|---|----------------|-----------------|------------------|---|----------------|-----------------|------------------|
| SUSTAINABLE DEVELOPMENT AND THE ENVIRONMENT | N * | I ** | P *** | ONLINE EDUCATION | N * | I ** | P *** |
| Methodologies for diagnosis, follow-up and evaluation of community forestry development projects | 3 | 717 | 80 | What is virtual education? | 2 | 290 | 48 |
| Payment for environmental services. A strategy for tropical forest and biodiversity conservation? | 1 | 287 | 32 | How to develop a virtual education course | 1 | 155 | 24 |
| Forestry policy impact on forests and forests' users | 1 | 126 | 14 | Technical tools used for production of virtual courses | 1 | 60 | 16 |
| Contributions of Social Analysis System (SAS ²) to community forestry development | 1 | 315 | 23 | INTERCULTURAL RELATIONS | | | |
| Community law and the management of community resources | 2 | 283 | 41 | Law and indigenous rights | 1 | 272 | 24 |
| Legal skills for the management of protected areas | 1 | 67 | 18 | Indigenous women participation in local governments | 3 | 418 | 51 |
| Introduction to forestry ecology in tropical areas | 2 | 290 | 35 | Cosmovisión e interculturalidad andino-amazónica | 1 | 1093 | 19 |
| Andean regime of access to genetic resources (Decision 391 CAN) | 2 | 252 | 31 | Indigenous territories | 4 | 860 | 97 |
| Community silviculture & agro-forestry systems | 4 | 185 | 79 | Theory and methodology tools for ethnographic research | 1 | 85 | 16 |
| Project design using Logic Framework Method | 1 | 467 | 16 | HUMAN AND SOCIAL DEVELOPMENT | | | |
| Systems of environmental management | 2 | 688 | 90 | CANADIAN COURSES **** | | | |
| Environmental auditing | 1 | 232 | 36 | Energy, development & environment | 1 | 205 | 17 |
| Bio-geography, ecology and arid areas conservation with emphasis on Neo-tropic | 1 | 175 | 14 | Social economy: theory and practice | 1 | 284 | 22 |
| Essential bases for sustainable development | 3 | 332 | 64 | Best practices" in migration, remittances & development projects | 2 | 195 | 33 |
| Tourism and sustainable development | 1 | 315 | 17 | Women and food sovereignty | 1 | 141 | 30 |
| Integrated management of plagues | 1 | 201 | 17 | 'Neo-liberalismo', 'giro a la izquierda', 'populismo' y otros dilemas | 2 | 391 | 26 |
| The conservation of nature in Latin American political constitutions | 1 | 256 | 23 | Social vulnerability, sexual and reproductive citizenship, health and rights in LAC | 2 | 432 | 31 |
| Environmental management for sustainable development | 1 | 367 | 20 | Self-determination & indigenous autonomy in L.A. & Canada | 1 | 128 | 22 |
| LOCAL DEVELOPMENT | | | | LATIN AMERICAN COURSES | | | |
| Introduction to Social Analysis System | 3 | 288 | 108 | Leadership from a gender and intercultural perspective | 2 | 648 | 48 |
| Local development | 10 | 2339 | 203 | Cities and urban space process of transformation | 1 | 146 | 18 |
| Conceptual framework for the measurement of local economies | 3 | 258 | 65 | Intercultural communication as a tool in the work environment | 2 | 275 | 33 |
| Public policies and local development | 1 | 127 | 35 | Participatory planning and design of communication strategies | 3 | 433 | 22 |
| Energy planning, design, implementation and management of solar-power systems | 1 | 137 | 31 | Environmental health | 3 | 804 | 70 |
| Territorial planning | 10 | 3015 | 312 | Economic ecology | 2 | 607 | 24 |
| Formulation of plans for land use | 6 | 1059 | 129 | Climatic change: causes and impact | 2 | 522 | 39 |
| | | | | Introduction of Systems of Social Analysis | 5 | 962 | 125 |
| | | | | Guide of tools for territorial analysis | 1 | 143 | 15 |
| | | | | Quantification of the social economy | 2 | 183 | 35 |
| TOTAL: 52 courses | | | | | 110 | 22510 | 2438 |

* Number of times a course has been delivered

** Number of persons that indicated interest in the course on the base of summary information given in the newsletter

*** Number of persons that registered in the course after receiving detailed information on content and fees

**** Courses delivered by Canadian graduate students and professors

| Table 3 Distribution of Interested Persons (I) And Participants (P) by Type of Professional Work in Four Selected CEBEM Courses. | | | | | | | | |
|--|-----------------------------------|-------|----------------|-------|------------------|-------|---|-------|
| Type of professional work | Energy, Development & Environment | | Social Economy | | Food Sovereignty | | Social Vulnerability Sexual & Reproductive Rights | |
| | I | P | I | P | I | P | I | P |
| Private sector / consultancies (1) | 25.8 | 46.7 | 6.4 | 19.0 | 16.4 | 3.8 | 11.4 | 28.6 |
| Director / Executive of NGO | 5.2 | | 7.2 | 9.5 | 5.5 | 3.8 | 10.9 | |
| Officer of foundation (2) | 5.9 | 6.7 | 2.6 | 4.8 | 3.6 | | 6.6 | 7.1 |
| Officer / member of NGO (3) | 9.2 | 13.3 | 28.7 | 4.8 | 27.2 | 34.6 | 28.2 | 21.5 |
| Community based organization | | | 14.7 | 4.8 | 6.4 | 15.4 | | |
| University Professor / Higher Education Institution | | 1.3 | 3.0 | 4.8 | 6.4 | 3.8 | 13.3 | 21.5 |
| Researcher at university / institute | 7.2 | 6.7 | 4.9 | | 10.9 | 19.3 | 4.7 | |
| Local authority / Officer at municipality | 12.5 | | 5.3 | | 0.9 | | 9.0 | 7.1 |
| National ministry officer / employee | 3.9 | | 7.6 | 42.8 | 8.2 | | 5.0 | |
| Other type of national government institution | 6.6 | | 6.8 | | 7.3 | | 2.7 | |
| Project manager / operator (4) | 6.6 | | 3.4 | 9.5 | 5.4 | 7.7 | 6.2 | 7.1 |
| University student | 2.6 | 13.3 | 0.7 | | 0.9 | 11.6 | 2.0 | 7.1 |
| Other | | | 8.7 | | 0.9 | | | |
| Total (percent) | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| N | 152 | 15 | 265 | 21 | 110 | 26 | 256 | 14 |
| (1) Managers of private enterprises, self-employed workers, consultants, advisors (2) Members / officials of NGOs who operate as national foundations (3) Includes administrators, general coordinators, program coordinators, members (4) Includes individuals who stated they were operating a program or project | | | | | | | | |

Endnotes

ⁱ http://ccd-ckd.cebem.org/pages/can/result_eng.php

ⁱⁱ <http://www.cebem.org/bibliotecas/index.php?t=0>

ⁱⁱⁱ Red de Desarrollo y Sostenible y Medio Ambiente (REDESMA)
<http://www.cebem.org/boletin.php?s=103>

^{iv} CEBEM has the practice of asking, at the time a course is advertised, for a pre-registration. Subsequently, information about course content, registration procedures and cost is sent to registered persons.

^v http://ccd-ckd.cebem.org/who/index_eng.php; http://ccd-ckd.cebem.org/who/index_eng.php The project's budget was CAD 497,991 for a 24-month period. Partners contributed CAD 111,786 in-kind. The project was extended for another 8-month period and supplemented by CAD 76,446. Total funding was CAD 574,437 for a 32-month period. Total budget including in-kind was CAD 686,223. It began activities on November 01, 2008 and it was completed on June 30, 2011. The project was developed with cooperation from Gisele Morin-Labatut, MLs, IDRC Senior Program Specialist, Partnerships Program, who monitored it until her retirement in March 2010. Subsequently the project activities were followed-up by Dr. Luc Mougeot, IDRC Senior Program Specialist.

^{vi} An additional objective was to contribute to furthering dissemination, through online courses and seminars, of the Social Analysis System (SAS²). SAS² offers a model for collaborative inquiry and social engagement that helps actors, managers, consultants and academics to support diagnostic thinking and strategic actions in their communities and workplaces and to understand and manage complex and unpredictable situations. It seeks to bridge gaps between civil society and the academic world by showing

how to incorporate effectively the contributions of action research into processes of knowledge production, problem solving and decision-making (<http://www.sas2.net/>).

vii The CKD project produced the Canadian component of databases. It includes data on (1) Canadian specialists in LAC development issues across all disciplines, (2) Canadian research centres, in all disciplines and (3) Canadian graduate programs - in this last case in the four focus themes of the project only. Data were gathered also on Canadian networks, journals, development institutions, donors, and other sources of information. Data on Canadian specialists and programs were gathered university-by-university, program-by-program, and CV-by-CV across 70 Canadian universities and had by the end of the project data for 568 Canadian specialists, 616 research centers and 50 graduate programs^{vii}. The result is the most complete registry of Canadian specialists on LAC with information about disciplinary interests, CV, and institution. More importantly, it has a search engine and a wide menu of key words for conducting diverse sort of inquiries. http://ccd-ckd.cebem.org/pages/can/result_eng.php

viii <http://revistavirtual.redesma.org/vol12/index.php>

ix Red de Aprendizaje para la Conservación (RAC) is an initiative of REDESMA with the support of Conservation International; it strives to be an interactive space in which users can interact directly through uploading documents, projects or others, and by creating their own communities, for which they have tools such as databases, thematic areas, project showcases, forums, and courses. <http://rac.cebem.org/index.php>

x <http://relacionesinterculturales.cebem.org>

xi <http://rippet.cebem.org/>

xixii Network for Sustainable Rural Development and the Environment
http://www.redesma.org/index_i.php

xiii <http://africa.redesma.org/>

xiv Área Común de Educación Superior entre América Latina, el Caribe y la Unión Europea (ALCUE)
http://www.vertebralcue.org/index.php?option=com_content&view=frontpage&Itemid=165&lang=en

xv <http://perspectives.apps01.yorku.ca/>; <http://perspectives.apps01.yorku.ca/category/featured-content/>

xvi The expenses in this calculation included the costs related to webmaster, communication, Internet services, administration, LAC course instructor, and five partial scholarships of US \$100. Income wise, a maximum fee of US \$150 was assumed because, according to previous experience, a higher fee would discourage registration. For this analysis, LAC instructors were assumed to be paid US \$3,500 per course produced, and Canadian instructors up to CAD \$5,000. Costs of academic coordination, selection of instructors, and general supervision, were not included. A similar analysis was conducted for the case of training of graduate students. In this case it was assumed that a Canadian graduate student working as course instructor is paid CAD \$5,000, LAC graduate students are paid US \$2,000, and professors of Canadian and LAC universities contribute 'in-kind' working hours for selection and supervision of students. Results estimated total costs for a package of nine courses delivered twice in a year at around US\$110,000. However, the potential cost recovery could be between 54 and 31 percent depending on the number of participants per course – 20 or 15 – and the total number of individuals that received training – 360 or 270.

xvii Notwithstanding, one participant to a CIC course became a CEBEM instructor and delivered a forum and a course on intercultural relations. CIC with the project's support provided four scholarships that permitted participation of individuals from LAC.

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