

Think Globally, Learn Locally: Democratising Learning for International Organisations

INTRODUCTION

In the lead up to the millennium, the rapid development of the World Wide Web, internet and word processing technologies began to change the way we communicate, work, learn, and live. In its most positive light, information and communication technologies have enabled new work and learning opportunities across boundaries and among communities. This paper focuses on how this change applied sensibly has opened up new dimensions for the provision of equitable, accessible and affordable learning opportunities to develop the international workforce professionally. The context of discussion is based on Commonwealth of Learning's experience in providing transnational workplace training for four UN organizations, one humanitarian organisation and an international financial institution. This has witnessed the opening up of effective virtual classes for learners based in over 100 different countries, enabling the medical officer based in Luanda, Angola to pursue the same learning experience as his/her counterpart based in Geneva.

We describe the paradigm shift taking place as "Think globally, learn locally" an educational version of the well known dictum of "think globally, act locally"ⁱ. The shift was triggered by employing appropriate information and communication technologies (ICTs) in a pedagogically sound manner to enable the widest distribution of cross-boarders learning and to encourage the unrestricted access to learning by women and marginalized learners in troubled, remote and isolated locations in the world.

THE COL FORMULA - HOW TO ENGAGE TECHNOLOGY IN DEVELOPING AND DELIVERING EFFECTIVE LEARNING

The foundational blocks to eLearningⁱⁱ are technology backbone and digital content. The former refers to the infrastructure upon which content can be stored and retrieved and learner and learning support can be orchestrated e.g. synchronous and asynchronous chats, threaded discussions, and one-on-one email coaching or mentoring. The digital content refers to study materials appropriate to the organizational, communal, cultural and technological context. The result is the design of content that reflects the media in which it is presented, including the presentation of textual material in a web-based environment, taking advantage of hyper linking to resources, and incorporating visual and audio elements to the interface of the materials.

Appreciating the power and potential of ICT for fast and affordable communication, international organizations have invested in technology to enhance communication and information flow, to capture knowledge generated at global, national, community and individual levels and to organize and store information for easy retrieval and reuse. Building on this investment is the development of a learning strategy that capitalizes on connecting people to information access and just-in-time learning.

However, the set-up and acculturation of the large technological infrastructures can be a slow and expensive start-up process. Incorporating training into such infrastructure is no less fraught with dangers such as skepticism, resistance to change, and the unreliability of new technology.

Therefore, bringing training into this mix requires the anticipation of a few essential questions that belie a return to the fundamentals of designing learning experiences:

- What do learners need to learn according to the demands of their work and the mission of their organization?
- How best to acquire knowledge and skills under a particular set of circumstances?
- How to retain, retrieve and apply selected learning outcomes?

COL has found that the following stepsⁱⁱⁱ adapted appropriately for international organizations have led to positive results.

COL Steps	Writing Effectively for International Organisations
<p>1. Needs Analysis</p> <p>Market research on the demand and need for an online course should be the starting point. The resulting report should contextualise the project, outlining its benefits or disadvantages and potential obstacles.</p> <p>Demand for online courses: does real demand exist? Will online delivery be cost-effective? Is it the best option currently available?</p> <p>Course credit and equivalence: how will course credits be transferred for certification? What about the equivalence of the course with face-to-face programmes? Is it necessary to get certification from an accreditation body?</p>	<p>The project team researched on the demand and need for an eLearning course to contextualize the project, outlining its benefits or disadvantages and potential obstacles. COL undertook a detailed needs analysis of the partnering organization in investing in developing the writing power of its international workforce. This is done through interviewing training managers who have a comprehensive and in depth understanding of the corporate strategies for human resources development, the language competencies of employees and the outcomes of training intervention.</p> <p>After many discussions with colleagues at headquarters and regional offices and interviews with a cross section of potential learners, a competency and constructivist based, non-credit bearing, customized and tutor-mediated elearning format was established.</p>
<p>2. Learner Profile</p> <p>This will help you understand who your potential learners are, and how you can best fulfill their learning needs.</p> <p>Hardware/software: do learners need to purchase special hardware or software to access the course? Most computers now ship with a web browser. If learners have to download a special plug-in from the Internet to view a particular course component, it is better to provide them with a CD-ROM of that component to save costly Internet access time.</p> <p>Internet access/bandwidth: how accessible is the Internet for the learners, and what bandwidth or connectivity (e.g.</p>	<p>Understanding learners' study environment, technology access and discovering how to best fulfill their learning needs emerge from the needs analysis exercise. The learners comfort level in learning through technology and motivation to learn are among the considerations that are explored. COL gathered learner profiles through extensive interviews with HR personnel, and potential learners and baseline data collection through pre-learning survey. How diverse and mixed are the potential learners? How can diversity be met and how can gaps be bridged in terms of knowledge, competencies and skills?</p> <p>In the end a modular approach was adopted to cater for the different needs of report writing and general correspondence of a wide range of professional and administrative staff. These are the application modules that are created as an extension of the foundational and compulsory module on effective communication principles.</p>

<p>dial-up modem, DSL, cable) is available? Low bandwidth availability has significant design and pedagogic implications. You can't prepare learning materials based on graphics, animation, sound or video because of the time and costs involved for learners to adequately view or download the materials.</p> <p>Costs: who will bear the cost of needed computers and Internet access? Although normally this falls to the student, the costs may be prohibitive. Is it possible for your organisation to arrange for subsidised learning, in partnership with industry or government? Can you facilitate educational loans? Is it possible for you to create learning resource centres, with computers and Internet facilities, for group learning and access?</p>	<p>None of the COL partners nor COL have an LMS in place. We therefore looked at the lowest common denominator of technology that form the most reliable and practical means of backbone to support and enable:</p> <ul style="list-style-type: none"> • the transfer of learning materials • the connection with tutors and learners • the connection with COL, learners and tutors • the connection with COL and partnering organizations <p>Email and Word jump out as the cornerstone on which the elearning course will be built.</p>
<p>3. Organisational Profile</p> <p>Your organisation must be prepared to undertake an online learning project.</p> <p>Expertise and infrastructure: do you have the in-house expertise to design, develop and deliver an online programme? Do you have the infrastructure to support online courses, or will upgrading be needed? Can you affordably outsource expertise (content and technology) and infrastructure from elsewhere?</p> <p>Faculty development: How prepared is your faculty to handle additional online courses? Will faculty be compensated for any extra effort, and in what way? What training facilities are available for teachers to upgrade their teaching skills for the online learning environment?</p>	<p>COL learns with its partnering organizations throughout the development and delivery process. We walk out talk and put best practice into action. What COL and partners share are:</p> <ol style="list-style-type: none"> 1. Commitment to liberate learning through engaging technology appropriately and wisely 2. Commitment to collaborate and seek progressive and workable solutions together
<p>4. Blue Print</p> <p>In addition to the needs analysis, learner and organisational profiles, the blueprint for the course should contain:</p> <p>Pedagogical features: Online teaching and learning must meet the requirements of the subject and the needs of the target learner group. Online learning can be a supplement to face-to-face instruction, equally mixed with face-to-face instruction, or the main</p>	<p>4. Blueprint</p> <p>Steps 1-3 involve the preliminary investigations needed to gain a better knowledge of the organization and its training requirements and capabilities. The blueprint takes the training programme development to the first step of action. With the blueprint, the designers draw up a rough outline of what that training might look like, including features spelled out in sections 4.1 to 4.6.</p> <p>Pedagogical features: There was constant reference</p>

delivery method, instead of face-to-face instruction. The last category is the most challenging for educators and instructional designers. When designing online learning, it is best to consider the best practices of all learning theories (behaviourism, cognitivism, constructivism). The WWW provides opportunities to use all these.

Media mix: An appropriate media mix for the course, taking into account the suitability of a given media to a particular subject (such as using 3-D models for an architectural drawing), will increase the effectiveness of student learning and contribute to the successful achievement of course objectives. Media delivery options must be decided during course content planning, so that the appropriate media creation tools can be used for content development.

Interaction: Interaction is a major contributing factor to successful learning experiences. Table 1 lists different possible learning technology combinations, based on three basic interaction modes (Moore, 1989) and on four methods of computer-mediated communication (Paulsen, 1997).

Assessment: Assessment and evaluation of learner performance is crucial. Although online examination brings a number of authenticity, security and certification issues, evaluation models should take the WWW's constructivist (student-centred) approach into account. The WWW can facilitate many evaluation systems - from computer-based (web-based) objective testing to tutor-evaluated, long answer tests or assignments - but is capable of supporting much more than the traditional, three-hour paper and pencil test. Online course developers now use alternative assessment tools such as evidence-based tests (where learners submit projects online), learning diary submission, participation in discussion forums or peer-based evaluation.

Learner responsibilities: The nature of online learning requires learners to be very self-motivated. The role of the instructor is to challenge learner curiosity and help

and dialogue on the following issues:

What are the learning objectives and outcomes?

What are the learners needs?

How best to achieve the outcomes?

How to retain and apply learning?

How can learning be democratised for a dispersed and diverse workforce?

Media mix: We look at print, CD Rom and a combination of both. These are considered in light of accessibility, affordability, reliability and learner friendliness.

Interaction: We placed great emphasis on interaction: i.e. Learner interaction with materials, learner interaction with personal coach and learner interaction with counselling and support. According to Moore^[i], Rowntree^[ii] and Holmberg^[iii], education at a distance is enhanced when interaction and dialogue is encouraged.

The psychological and communication gap that can develop between tutor and learner in a distance education course is not an inevitable consequence of physical separation. This psychological and communication gap, which Moore calls the transactional distance, can be overcome by a course structure that encourages learner autonomy, and encouragement of interaction. Interaction in this instance will be of several types:

- Participants will interact with the course materials themselves, entering into an internal dialogue with the tutorial in text-based format.
- Participants will interact with their tutor, entering into an ongoing and largely participant-driven dialogue.
- Participants may interact with other participants completing the course, through group emails or within course management software.

Assessment: The centre piece of assessment is about encouraging learning success. The assessment is designed with two re-submissions to apply knowledge, to reinforce learning through re-write and re-think and to build confidence through meeting the criteria.

Tutor Marked Assignments (TMAs) is the key tool for engaging tutor and the learner in a dialogue mode to exchange views, raise questions, find answers,

learners achieve personal learning goals. Online learning should therefore be designed according to adult learning principles, in which learners have as much responsibility as their teachers, if not more. Learners need to be informed of their role and responsibility prior to starting the course. A period of orientation may be needed, as most online learners are initially novices of the medium.

Development strategy: At this point in the design and development of online learning, most institutions and instructors have to decide if the course will be developed using a suite of individually available web tools, or an integrated course delivery software package.

In general, web-based applications such as email, discussion groups and chat software are not designed for educational purposes. Using them in isolation or developing an integrated educational system around them may not be effective in terms of cost, time or learning outcomes. *Integrated systems for online learning* are needed because the generic web environment does not provide: a standard way to organise course materials prior evidence of the environment's instructional effectiveness
tools to support basic instructional activities such as course design, organisation of groups spaces and personal spaces, grading, and easy integration of multiple media files models to support learning strategies that involve collaborative learning, knowledge building and multiple representations of ideas and knowledge structures (Harasim, 1999).

Commercially available, integrated application software packages include facilities for every aspect of designing an online learning programme.

Learner tools are available to learners when they log on to the system:

Course tools: for content presentation, displaying industry-standard, interactive web

consolidate knowledge, change bad habits, and build strengths.

Learner responsibilities: COL brief learners of their responsibilities, remind them and motivate them with carrots and arm them with skills. It is important for learners to be aware of their freedom and independence as well as the virtual help desk they could access when such needs arise.

Development strategy : We resisted the glitziness and the bells and whistles of technology. Instead we focussed on creating a level learning field for cross border adult workplace learning.

Balancing access, costs, availability. The course was constructed using a mixed bag of tools readily available to all users

Learner tools: Emails, CDs, windows word files, CD player and the internet.

Course tools: a self contained print based work book or interactive CD Rom.

Collaboration Tools: Emails, word files.

Support tools: E-coach, E-course coordinator, personalized library, search facilities, study guide, bookmark.

Developer tools: XML FLASH, WORD.

Administrator tools: CIS, ACEware (Both are LRMS software)

Designer tool: EXCEL, WORD

Learning management tools: Monthly progress report templates, EXCEL, CIS and ACEware.

pages to learners. The pages have links for navigation, and contain all course texts, graphics and multimedia learning materials

Collaboration tools: for synchronous and asynchronous activities like email for one-to-one communication, discussion boards for conferencing, chat for real time clarification of doubts, whiteboards for lecture presentation and group work, or a virtual "drop box" for sharing programmes and applications

Support tools: include personal learner profiles, a facility to upload files to the system (e.g. for submitting assignments), personal library, search facilities, study skills guidance, bookmark facilities (to remember where you stopped in the last session) and calendars.

Developer tools for the website administrator and the instructor. These seem initially more complex, but are easy to use after a short training or demonstration period:

Administrator tools: allow course software to be installed on a server, provides resource monitoring and website management facilities. Assigns user identification, passwords and usage rights to learners. Some systems also handle online registration and fee payment

Designer tools: online teaching tools for the instructor. Includes facilities to prepare course plans, upload files (course content) and announcements, design assessment tools (such as quizzes) and a calendar of activities. The instructor can also design the appearance of individual web pages through choice of background colour, text font and type of images or graphics.

Learning management tools are features to track student progress and log-ins to the website. Instructors can monitor the progress of individual learners and provide personalised feedback. Complete statistics on website use can be generated for

<p>reviewing or evaluating policies and practices. Interactive user guides and "Help" facilities for troubleshooting and systems operation are also common in almost all software packages, for both learner and developer tools.</p>	
<p>5. Institutional Preparation</p> <p>Any project-related hardware or software should be installed and tested. All involved faculty and staff should be trained in the systems and equipment, and should be familiarised with the pedagogical techniques.</p>	<p>5. Institutional Preparation</p> <p>COL piloted the materials, trained the tutors, briefed the learners and engaged all players in one-on-one or group email exchanges.</p>
<p>6. Learning materials development</p> <p>Implementing course development and design standards maintain consistency, especially if many people or partner organisations are involved. Since course development is time consuming, it is worth securing permission to use or adapt existing material where appropriate to launch the course more quickly.</p>	<p>6. Learning Materials Development</p> <p>Since this course is highly customised, the general content is about 30% and organization specific 70%.</p> <p>The generosity of UNHCR in sharing the original course design with other UN and international organizations is a great example of collegiality and reducing repetition and waste. This has enabled subsequent versioning to happen faster.</p>
<p>7. Evaluation</p> <p>Once course materials are uploaded to the online learning environment, there should be a field trial of the learning materials and usability testing of the website, possibly through an initial pilot project. No online course should be launched without thorough evaluation. Consider:</p> <p>Learning effectiveness: how does the online course compare with face-to-face or other distance delivery methods?</p> <p>Cost-effectiveness: take into account the high initial set-up cost, and any ongoing costs such as upgrading of equipment or software.</p> <p>Learning environment: how do learners negotiate the online environment?</p> <p>Accreditation: the issues/problems in accreditation of online learning.</p> <p>Evaluation: how do you improve the evaluation process?</p>	<p>7. Evaluation</p> <p>Materials, learning support and course administration are subject to continuous renewal both at course end and at 2-3 year interval to gauge currency of content, and the effectiveness of the course over a period of time.</p> <p>End of course evaluation questionnaire, specially commissioned programme review and monitoring of TMAs all contribute to continuous evaluation of course performance.</p>

<p>8. Promotion</p> <p>The course must be promoted both online and offline to its target learners, with plenty of lead-time for course registration. Ongoing promotion will encourage the level of enrolment needed to make the programme financially viable</p>	<p>Two months prior to course start see the launch of the recruitment campaign. This will ensure sufficient time is allocated to planning, counseling, materials production and dispatch and refreshing the learner support system.</p>
<p>9. Maintenance and Updating</p> <p>Online programmes require constant updating and maintenance to be effective. Learners need prompt feedback to address concerns and technical problems. Course instructors or specialised personnel should be trained to constantly monitor and maintain the website.</p>	<p>Through regular contacts (distance and face to face) between Learning Managers at COL and at international organizations, and annual contract renewal, maintenance and updating issues on materials, resources, support, learning performance and outcomes are re-visited and reviewed.</p>

SHIFTING DIGITAL DIVIDE INTO DIGITAL DIVIDEND

In the early nineties when email was first introduced in academic institutions in Hong Kong, the reach of e-messages was limited to computers within the same building. During the start of the millennium, UNHCR already had in place an email (unhcr.ch) structure that was able to reach beyond mountains and oceans to the remotest outposts. However, there were still pockets of difficulties in reaching cities where the technological infrastructure was unstable. For example, Kandahar in 2001 used a radio-based email system that refused to carry email attachments. For the purposes of training in an online environment, this was a considerable barrier for the purposes of the technology- mediated learning design, i.e. tutoring, submission and marking of assignments, all of which was facilitated by the use of Word documents transmitted by email. To remedy the situation, COL established a buddy system whereby the Afghanistan course participant identified “a buddy” in the closest regional office who had reliable, non-radio based email access. The buddy then became the liaison point between the participant and the tutor and the course progressed more as a traditional distance learning course, in that transmission of assignments and correspondence took place by land via UNHCR’s pouch delivery system. Granted, this seems to be a very inelegant solution to a basic technological problem, but it was effective and needed at the time in order to ensure the success of the programme. With the continuous improvement of technology, email connectivity has been strengthened and improved to a state recently where email connections have become a lot more robust and reliable for eLearning to happen.

Because of the speed of change related to technological improvements, there is a progressive change to the design and production of course materials. The Writing Effectively courses began as print-based materials to be dispatched to the learners via the UN special pouch delivery. Over time, there has been a move to using CDROMs and intranets, both the result of technological infrastructure changes and client demands. Given the incredible mobility of workers in these organizations, the availability of course materials in digital format is regarded as increasing the access and convenience of access for learners. Also with highly customized course materials, keeping materials current means constant updating. Reprinting workbooks is a more extensive and expensive process that requires advanced logistical planning and resourcing. Updating digital content has become more flexible and economical. CDROMs can be reproduced quicker at lower costs. Digitized materials can also be uploaded to a globally accessible intranet. This relatively subtle change in format has enabled learning materials to be reproduced and be made available in a shorter time span and at lower costs.

LESSONS LEARNED

In designing eLearning programmes for international organizations, we have found that the following points reappear under the circumstances of course development and delivery of open and distance programmes for international organizations.

- Whilst programmes often funded by headquarters, the beneficiaries are literally all over the map, therefore it is always pertinent to ask the questions:
 - Will regional, national and field offices have the same technology backbone to receive, read, and access materials?
 - Will field based learners be able to send assignments and communicate with their tutors with ease?
 - Will this meet the learning style and needs of colleagues working from the field?
 - Is attention given to the nuances of culture, ethnicity, language, and gender of an international context?
- The pilot will always include participants from developed and developing countries, field offices and Headquarters.
- Designers must be attentive to potential environmental considerations on the global scale that might affect learners and learning e.g. the Tsunami, SARS pandemic the war in Iraq. Obviously, not everything can be anticipated but organizations respond differently to global crisis situations.
- Designers must choose the level of technology that will be the most accessible to the diversity of learners within an organization.
- A training programme needs to balance the isolation and loneliness of technology mediated learning with human touch and communal support and sharing. This will help make the programme not only effective but accepted by learners as a viable training alternative.

CONCLUSION

The ideal of the UN organizations in adopting open distance and technology mediated learning is to achieve democratization of learning for employees based in headquarters as well as regional and field offices, in cities and in villages, in well connected hubs and in isolated communities. In working with global adult learners we have witnessed the following which are showing promising signs of the leveling of learning field that reaps digital dividend. Evidence of the results of democratization of learning are:

- Affordable and accessible learning for urban, rural, and island dwellers
- Training for workers based in war and disaster struck zones
- More women trained (COL statistics: male vs female learners, 30% vs 70%)
- More support staff get the same training opportunity (COL statistics: professional vs. non-professional learners, 35% vs 65%)
- Offering training opportunities to marginalized learners.

In gathering learner feedback, the following comments representing many similar voices reinforce the need and the impact of global courses for local learning.

This is the first time that I take a long distance course. WEFUNHCR has been an excellent experience. The overall course was well presented and organized, which made it easy to follow and enjoyable. The material is superb, mostly because I can apply it to my daily work. I have recommended this course to all my colleagues. Besides the course in itself, I thought that my tutor was great. Not only did she respond in a timely manner, but also her comments were appropriate and encouraging. I liked it that she not only pointed out the mistakes which needed corrections, but also pointed out the positive

aspects of my work. I found myself looking forward to her comments. Thank you for making the course available.

The tutor had a key role in the success of the course. It is only at the stage of practicing the assignments that I appreciated some of the content of the course material, and the tutor's feedback was the only means to verify my learning progress. In addition to contributing his competence he was an intelligent reader participating in the discussion and making the exchange very fruitful. I think he was generous in doing his work; he always provided feedback and additional sources of information in response to my queries. The 'distance' approach of the course is particularly appropriate I think, since one is forced to put in writing explanations and comments for the tutor that normally would be verbal discussions with the editor. Since it is by practicing that one can consolidate what learnt in this course all writing is part of the learning process.

Distance learning with a CD Rom is the only possibility for staff from our Office in Lyon (i.e. far away from Geneva Headquarters) to follow courses for the moment. I think it is a good means for staff to study even if it requires a lot of work at home (studying in the office was hardly possible due to an important workload these last few months). It would actually be very nice if more courses could be followed this way.

ENDNOTES

ⁱ Naisbitt, J (1994), *Global Paradox*, Avon Books, New York.

ⁱⁱ Farrell, Glen (Ed.) 2003 *A Virtual University for Small States of the Commonwealth*, Vancouver. The Commonwealth of Learning, Vancouver.

COL's definition of eLearning - Online learning and eLearning – terms that have emerged to describe the application of information and communication technologies (ICTs) to enhance distance education, implement open learning policies, make learning activities more flexible and enable those learning activities to be distributed among many learning venues.

ⁱⁱⁱ Sanjaya, Mestra (2001/2002). *Designing online Learning*, The Commonwealth of Learning, Vancouver.