Using ICT to Support Professional Development on Open and Distance Learning in Southern Africa

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INTRODUCTION

The Commonwealth of Learning (COL) has been providing training support to distance education practitioners for several years. A key focus of its work has been to support policy makers who are required to consider effective policy environments for distance education. While facilitating face-to-face workshops has immense value, there is a growing view that using technology can offer a range of added value to professional development activities. It is with this in mind that COL established a project that developed such a course using the Internet (or CD-ROM where connectivity was a problem). A further consideration is to test the use of such technology within the Southern African region, noting its developing world status and the immense need for professional development amongst its people.

Working with members of the Southern African Development Community (SADC) Technical Committee for Distance Education, COL focused on providing an online educational experience for policy makers in Southern Africa. This was to be complemented by a five-day face-to-face training session, which aimed to ensure that the best of educational strategies was combined in creating a training course for distance education policy makers.

COL commissioned the South African Institute for Distance Education (SAIDE) to develop and implement the online course that lasted four months. During this period, COL commissioned an evaluation to be conducted during and after the course. This paper outlines the experience of implementing this course, and lessons learned from it.

RATIONALE FOR THIS PROFESSIONAL DEVELOPMENT COURSE

The Protocol on Education and Training recently adopted by the Southern African Development Community (SADC) notes that human-centred development is vital to achieve the socio-economic and development goals of the region. In promoting a people-centred development process, capacity building of all people within the region and in different economic and social sectors becomes important. The Protocol supports the SADC in its quest to build a community of politically stable and economically strong nations that can effectively compete in the world market place and contribute to international developments.

To achieve this, the Protocol calls for the establishment of various regional structures and specific Technical Committees. One such Technical Committee is the Technical Committee on Distance Education (TCDE). This committee has been given the brief to achieve objectives that include:
- Improving access to education and training,
- Reducing the cost of education and training by maximizing on economies of scale offered by distance education,
- Formulating national policies on distance education,

- Establishing distance learning institutions,
- Promoting cooperation in the development of distance learning materials, and
- Supporting the development of regional professional associations in distance education.

Members of the TCDE have met on various occasions, and developed a programme to achieve the above objectives. One of the main areas of work being recommended is a capacity building programme that will increase the knowledge and skills base of different aspects of distance education within the region. Members of the TCDE requested that they participate in a training programme/course that would enable them to deepen their understanding and skills in various areas pertaining to distance education. As the TCDE will be responsible for developing and implementing policy and strategic plans, it is necessary that they have an in-depth understanding of the key issues in the areas of policy, design and development of materials, planning distance education institutions and programmes, quality assurance, etc. This will enable the TCDE to be more confident about driving developments in this sector. This is seen as vital so that TCDE members will be able to inform countries and the region from an informed and knowledgeable base.

Given the workload of members of the TCDE, and the fact that participating in such capacity-building exercises is often time consuming and costly, it was suggested that an alternative method be developed. It was proposed that the capacity building course for the TCDE members be developed using an online format together with a face-to-face workshop. This format makes use of the computer and the Internet as a platform for delivery of the course. Experiencing such a course was also important for the members of the TCDE as they would experience first-hand use of such technology for distance education. If successful, then this format could be used for capacity building in other sectors of the education and training system. To accommodate those members of the TCDE that do not have access to the Internet, the course was also to be made available on a CD-ROM format.

While a primary driver for the development of this course was the needs of the SADC Technical Committee, COL was also keen to test this form of delivery for professional development of people within the region. This fitted into two of the four roles that COL has identified for itself in its three-year plan (2000 – 2003), viz.

- A **resource for training**, in recognition that considerable work remains to be done to develop and/or strengthen national capabilities with respect to open and distance learning;

- Adding value to **human capacity building,** by creating programs and models incorporating different technologies and learning media and demonstrating the ways in which they can be applied to build capacity wherever there is need.[1]

The use of this form of learning for professional development was also driven by the need to expand access to online learning and materials on open and distance learning. The Canadian Committee for Online Learning, in their report to the Government of Canada noted:

"Critical to fostering a lifelong learning culture will be use of the new learning tools to increase the accessibility of lifelong learning opportunities to Canadians. Yet if online

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[1] http://www.col.org/programmes/reporting/3year_plan.htm

learning is to contribute to the achievement of this objective, then there must be a vastly greater quantity of high-quality e-learning materials than exists at present" (P9, 2001)[2]

These intentions – using new learning tools, increase access to learning opportunities and the development of good quality learning materials – were important considerations for COL when determining whether it would support this initiative and provide financial and other resources for it. There was a definite move to use online learning (CD-ROMs were used where access to the Internet provided difficult with respect to telecommunications and access to prolonged connectivity) to support professional development within the SADC region.

COL also viewed this initiative as a pilot exercise where the education format, technology used, and content area would be tested. In this regard, an evaluator was chosen very early in the process to track the course development and delivery and undertake a summative evaluation

EXPECTED OUTPUTS

Using the above rationale as a motivation, COL began planning a pilot course combining online delivery and face-to-face workshops. In planning for this course, the following outputs were to be delivered:

1. *Design of course curriculum*
    The first requirement was to finalize the curriculum structure for the proposed course. This included:
    •   A detailed statement of proposed learning outcomes;
    •   Detailed categorized lists of relevant content areas linked to the course outcomes, together with identification of specific links between outcomes and subject areas;
    •   A brief description of the level of learning at which the course is pitched;
    •   Assessment criteria for each learning outcome, to provide participants guidelines for measuring their progress within the course;
    •   A detailed outline of the combinations of teaching and learning strategies (combining independent study, contact, and assessment) that will enable learners to achieved the stated outcomes of the course.

2. *Establishment of online course delivery system*
    The purpose of this was to provide a complete platform for offering an online course. This platform will allow for:
    •   Registration of participants and facilitators on the course;
    •   Registration of facilitators on the course;
    •   Tracking of nature of relationships between participants/facilitators and organizations with which they are associated;
    •   Security system (username and password) to limit access to course materials and platform to enrolled learners;
    •   Assignation of participants and facilitators to online discussion groups;
    •   Online management of discussion groups by facilitators;

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[2] http://www.schoolnet.ca/mlg/sites/acol-ccael

- Online posting of interactive materials (in any format, subject to limitations of user workstations), stored and managed according to their location within a course curriculum structure (see descriptions below for more information);
- Online tracking of progress of participants on specific learning activities against defined assessment criteria (based on critical feedback from mentors);
- Fully searchable course environment, permitting searches based on document meta-tags, as well as free-text searches.

3. *Design and development of online course materials*
   The third output was the online resources through which learners would work before and after the face-to-face workshop. More detailed descriptions of proposed structures for these materials are provided below.

4. *Mentoring support for online engagement between learners and educators*
   The fourth output was provision of a comprehensive online support system for participants in the course. The intention was to assign ten learners to each online mentor, thus allowing for intensive online discussion around the activities provided in the online course. This was to be provided both before and after a face-to-face session, and mentors were to provide ongoing feedback on activities.

5. *Design and running of five-day training workshop*
   Finally, the course would comprise an intensive, five-day workshop in Maputo, Mozambique, to complement the online course provided to participants. The workshop was to be designed for 20 participants, and involve four facilitators to ensure an intensive, structured educational experience.

BIRTH OF THE COURSE

Once COL had established clearly its project objectives, it began its search for an appropriate delivery partner. This search led to discussions with the South African Institute for Distance Education (SAIDE), a ten-year old non-governmental organization based in Johannesburg. SAIDE has had a long history of supporting distance education in South and Southern Africa, and seemed to be a logical sub-contractor to deliver the course. However, it was also necessary to tap the expertise available in the region as a whole, and thus additional experts from Botswana (Judith Kamau) and Lesotho (Manthoto Lephoto) were identified to participate in developing and delivering the course. Thus, was born a course we entitled *Supporting Distance Education through Policy Development*.

The purpose of the *Supporting Distance Education through Policy Development* course was to provide learners an introduction to ways in which national educational policies can support distance education practices. The course aimed to provide participants with an in-depth introduction to distance education concepts –as well as the related concept of open learning – and to the range of issues to consider in the implementation of distance education programmes. It situated this introduction within a context of national policy-making, in order to help learners understand better the relationship between good quality distance education practices and enabling national policy frameworks and mechanisms.

By the end of the *Supporting Distance Education through Policy Development* Course, we hoped that learners would be able to:

> *Understand and manage processes of making, implementing, and evaluating policy to support Distance Education practices.*

This would be reflected in their ability to:

1. Analyse a given educational context.
2. Develop a vision for opening learning in a given educational context.
3. Construct practical, realistic educational opportunities that meet the requirements/needs of a given educational context, and define management and resource needs to implement such opportunities.
4. Develop a policy that articulates realistic achievement of a policy vision within an analysed context.
5. Analyse changing roles of policy implementers and evaluators.

TARGET LEARNERS

This course was aimed – in the first instance – at government policy makers within the Southern African Development Community (SADC), although we also finally enrolled several people working at institutions. We assumed that learners:

- Had an introductory understanding of distance education, and thus required a comprehensive overview of the various facets of distance education theory and practice. Beyond this, it was assumed that there would be some degree of variance in the knowledge levels of learners with respect to distance education.
- Had some level of responsibility for defining national/institutional policies to govern distance education in their countries/institutions, but required support in understanding how national/institutional policy processes could foster best educational practice. Again, the course assumed variance in years of experience in national/institutional policy-making.
- Had access to reliable e-mail accounts, but insufficiently stable Internet access to be able to access materials online.
- Were all proficient in reading and writing English.
- Had some experience of teaching and/or an educational qualification of some kind.

While most of these assumptions proved correct, we discovered that, even at this level of employment, some learners struggled to access e-mail.

TEACHING AND LEARNING STRATEGIES

The course worked as follows:

1. Learners enrolled via e-mail in an online 'course', which ran part-time for two months. The purpose of this part of the course was to provide a conceptual platform for learners, which helped them to understand the implications of different policy choices regarding distance education.
2. During the online course, learners accessed a full online course environment, comprising activities, support resources, links to other useful web resources, and ongoing e-mail engagement with online mentors and a community of their peers. Continual feedback was provided via e-mail, while the course environment was designed in such a way that it was possible to monitor the progress of participants in the run up to a five-day face-to-face workshop. This also comprised ad hoc telephonic interaction and support with

learners, making up roughly 40 notional hours of learning. To ensure that access to resources was streamlined, learners received all materials that they required for the course on a CD-ROM.

3. After two months, participants gathered in Mozambique to participate in a five-day training session. Given the online preparation, the face-to-face course focused squarely on intensive interaction between participants and facilitators, providing participants opportunities to work through practical activities, share experiences and problems with their peers, and shape the learning environment so that it met their specific requirements. This comprised a further 40 notional hours of learning.

4. Following the face-to-face session, online interaction was continued for a further three months. This comprised a further 40 notional hours of learning, for a total of 120 notional hours of learning.


STRUCTURE OF THE CD

We were keen to be able to ensure as much flexibility as possible in the design and presentation of course materials. For this reason, we compiled the CD as an encyclopaedic resource that learners could navigate through in different ways. All supplementary readings and resources were accessible to CD users separate from the course structure, in an effort to maximize the potential usefulness of the CD. Thus, on launching the CD, users were given two navigation options:

1. The option to navigate through the course itself, from where they were able to access supplementary reading materials in support of the course-specific work that they were doing.

2. The option to browse through supplementary materials as reference resources. Following this option, users were able to access resources according to various subject categories without having to navigate through individual activities. In this way, we hoped that the CD would remain useful beyond the completion of the course itself.

Resources were presented using a combination of HTML and Portable Document Format (PDF). To ensure accessibility to PDF resources, we provided a version of Adobe Acrobat Reader on the CD. Using this technology, we were able to increase the volume of supplementary resource information we placed on the CD without incurring the expense of HTML design.

The CD layout worked as follows:
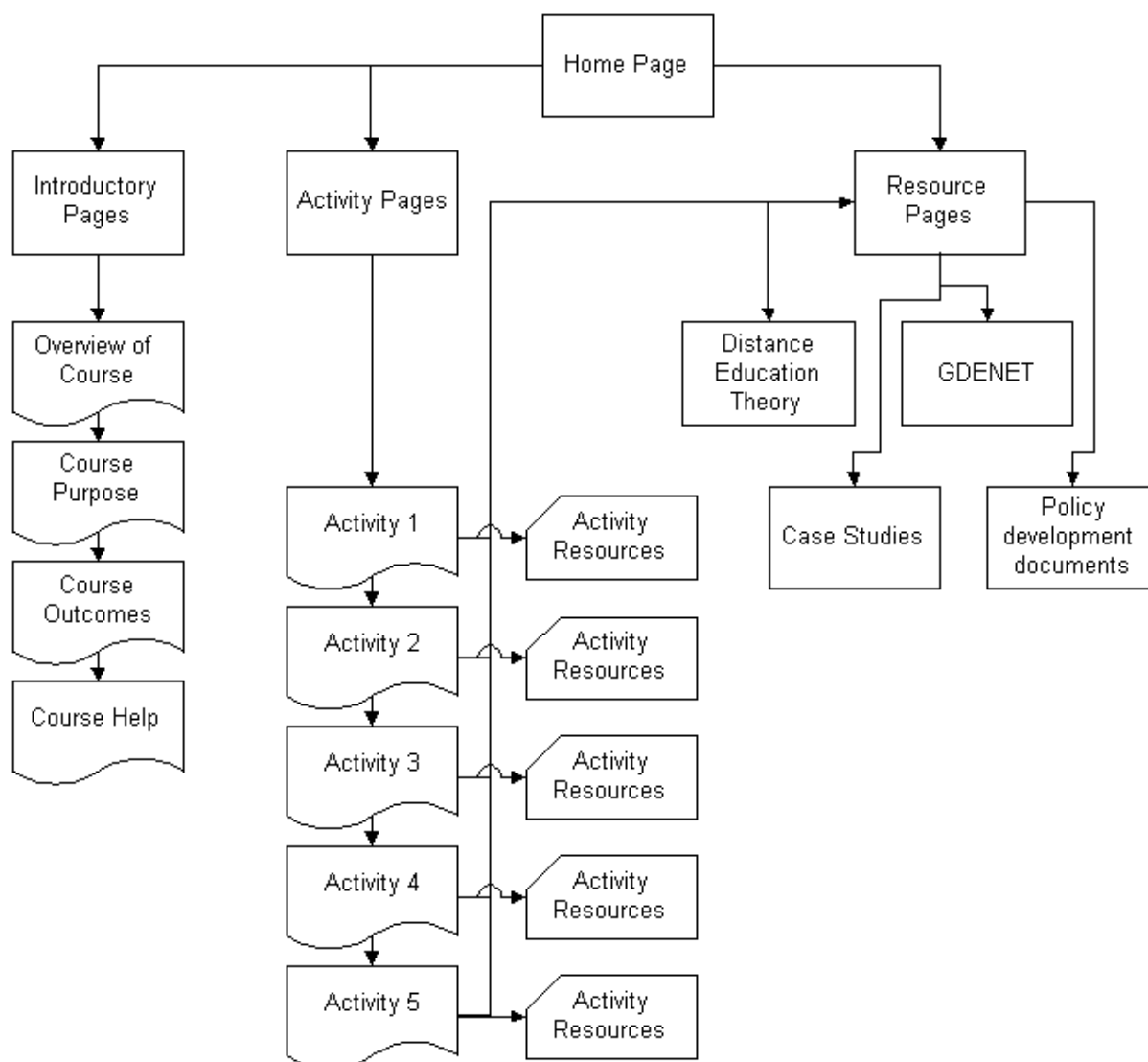
REFLECTING ON THE EXPERIENCE: A VIEW FROM THE IMPLEMENTATION AGENCY

On balance, the *Supporting Distance Education through Policy Development* course appears to have been successful. Over half of the participants completed all four online activities, which we considered to be a good achievement, considering that several participants' involvement in the course was hampered by lack of access to e-mail and that there was no formal accreditation for the course. The biggest problem was probably that there was no possibility of a second face-to-face session towards the end of the course. This may have helped to focus people's attention on completing activities a little sooner than they finally did. A key consideration for the future will also have to be the problem that the course was not certified in any way. Finally, we did also discover that offering a course such of this in the second half of the year was problematic, as most learners struggled to juggle their course obligations with those of their jobs.

Relating to the above, we also overestimated people's level of comfort with email. Some people were less comfortable using email than we had hoped they would be. Nevertheless, we do hope that this course helped to build their confidence. It does remain a problem that some

participants became excluded by their lack of access to email facilities. When we set up the course, we included an assumption about participants that they had functional email facilities, but this was not checked rigorously during the selection process. Participation rates might have been higher had this technical problem not existed (we estimate that it affected up to five people who participated in the face-to-face session). On the plus side, they did still get access to all of the resources contained on the CD.

However, feedback from the course has been consistently positive, both in terms of the workshop and the online experience. We were pleased with the numbers of people who completed all four activities in the online component of the course. Happily, COL also appears to share this view and thus together we are currently exploring the possibility of replicating the course in other parts of the world, as well as possibly adapting it for new audiences in Southern Africa.

REPORT OF THE EVALUATION

COL contracted Cisco Magagula – a well-respected distance education expert from the University of Swaziland – to evaluate the online course for policy makers working in open and distance learning (ODL) institutions in the SADC region. Specifically, the contract required the writer to determine whether the online course met course participants' needs (i.e. increasing their understanding and knowledge of policy development processes) and whether the delivery strategies were efficient and effective. The writer was required to focus on the worthiness of the two aspects of the course delivery: that is, online delivery using Internet (email facility and the CD) and face-to-face.

The evaluation of the online course covered the management process leading to the development of the course, use of the SAIDE website, online discussions, course materials, user friendliness of the online system, worthiness of the different types of support systems, and the participants' views of the online course. In addition, the face-to-face evaluation covered the quality of the workshop structure, process and materials used, the integration of the workshop with the online course, the value of the workshop for the participants, and the appropriateness of facilitators.

Subsequently, the evaluation covered the pre-workshop period, the one-week face-to-face period in Maputo, and the post workshop period. The methods of evaluating the online course included, among others, questionnaires, interviews, analysis of documents, email messages, and learning activities. The evaluator had a list of participants' and course facilitators' emails. Therefore, he was able to monitor the contribution of participants and course facilitators, the quality of the discussions, and the pace at which participants progressed in the course. Questionnaires were administered online through emails and at the face-to-face- workshops in Maputo. The formal and informal interviews were conducted at the face-to-face workshop in Maputo and as well as telephonically when the need arose.

With respect to the online course, it was well conceived and managed. The layout was simple and easy to follow. The hyperlinks were clear, very directive, simplified and easy for participants to manoeuvre. The learning activities were challenging, stimulating, and relevant to the social context and work environment of participants in the SADC region. At the same time, the activities attempted to tap, enhance and build on participants' work experience as well as depicted life situations.

Most participants were anxious about the online course prior to its commencement. However, after three weeks of participation, the level of anxiety of most of them had declined because they had gained confidence in using the CD and computers. The level of knowledge and skills of most participants regarding word processing, preparing and sending email messages, browsing for information in the Internet, and viewing the CD ranged from average to slightly above average. Indeed, most participants' computers had Internet connectivity, and CD-ROM drives. Participants who accessed the online course through the Internet complained, however, of the slowness of their computers in accessing the SAIDE website.

Generally, participants had difficulty opening PDF files and/or sending file attachments through email. Most participants found the instructions in the CD about the purpose, content, structure, expected outcomes, and mode of delivery of the online course very helpful. The comments they received from colleagues and/or course facilitators were also very helpful, encouraging, supportive, constructive, and confidence building. Online discussions were not fully utilized as expected despite facilitators' efforts and encouragements. The online system was very user friendly. Pertinent issues raised through discussions were often not followed through to their logical conclusion.

Concerning the face-to-face workshop, most participants felt that facilitators clearly stated the workshop objectives. The quality of the content, and the extent to which facilitators presented it, was quite good. The workshop's physical conditions and logistical arrangements were also good. The workshop activities met participants' expectations. The time allocated to the various workshop activities was adequate. The quality of the handouts and audio-visual equipment was good. The pace of facilitators' presentation was satisfactory in the sense that it was neither too fast nor too slow. The workshop activities were reasonable: they were neither very demanding, nor very light. Some participants felt that the workshop session on budgeting for a distance education programme was inadequately covered, and recommended that more time should be spent on it. The time provided by facilitators for active participation, practical activities, and group discussions were sufficient. Also, the duration of the Maputo workshop was sufficient.

The aspects of the workshop perceived by participants to be most valuable included the process of developing a vision and policy framework, characteristics of a good vision, guidelines for formulating a good policy, the session on financial planning, group activities, critical reflections, the inputs of resource persons, the activity on policy formulation and development, the video on vision, and linking vision to policy development, and designing and evaluating policy framework for ODL programme. The course content, handouts, supplementary readings, assigned activities, and course delivery format (i.e. online and face-to-face workshop) were critical features to the success of the online course. Indeed, participants were satisfied with the online course and it met their expectations.

Consequently, the aspects of the online course participants felt contributed most to their learning were the way the course was designed, the challenging nature of the course, the introductory activities, the face-to-face workshop in Maputo, support provided by facilitators, and the quality of reading materials in the CD. On the other hand, the aspects of the online course few participants felt contributed least to their learning were failure to send emails, which kept on bouncing back, and lack of online interaction among participants.

Based on participants' and course facilitators' views and feelings as well as the evaluator's observations, it was recommended that the two modes of course delivery (online and face-to-face) be retained. The topic on financial management be given more time and attention because it did not receive adequate time and attention at the Maputo workshop. People enrolling in this course, in future, should be computer literate and have access to the Internet and computer facilities. However, should some participants have no access to computers and internet/email facilities, they need to be provided with printed materials. Participants who fail to complete pre-face-to-face activities should not be allowed to attend the face-to-face workshop.

Course facilitators should regularly check if the participants' progress online is in accordance with the objectives of the online course. The course should be offered between June and August, not towards the end of the year because everyone seems to be very busy trying to meet deadlines at the workplace. The use of assigned learning activities as well as templates for writing responses should be retained. Course facilitators and peers should ensure that issues raised from peers' submissions are responded to rather than ignored. The SADC-TCDE should consider commissioning a survey study within the SADC region to establish the level of computer literacy, Internet connectivity, and access to computers with Internet connectivity and CD-ROM drives.

CONCLUSION

This paper reflects the process and results of the establishment, delivery and evaluation of the `Supporting Distance Education through Policy Development` Course. In conceptualizing the course, COL, together with members of the SADC TCDE and SAIDE (the course developers and delivery partners) were clear in wanting to contribute towards addressing the professional development needs of the SADC region policy managers. The partners were also very conscious of the need to experiment with new methods of delivering professional development, making appropriate use of information and communication technology.

The course evaluation indicates that this course has enabled professional development and was successful in the use of ICT to deliver such professional development. It is the authors' contention that such experiments can open the way to new modes of educational delivery, and thereby increases participation throughout the developing world of people in sustained professional development opportunities. The model that this course has tested and evaluated is now being applied to other areas of professional development within the SADC and other regions.

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