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Capacity building using an online training course¹

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ABSTRACT

This paper reports the findings of an evaluation of an online course for policy-makers in Southern Africa. The objectives of the study were to determine (i) appropriateness and effectiveness of the management process leading to the development and implementation of the online course, (ii) the use of the platform and CD for online discussions, (iii) quality of the online course materials, (iv) the user-friendliness of the online system, (v) the worthiness of the different types of support systems, (vi) the learners' views of the online course. Furthermore, the evaluator was asked to determine for the one week face-to-face workshop, (i) the quality of the workshop structure, (ii) process and materials used, (iii) the integration of the workshop with the online course, (iv) the value of the workshop for the learners, and (v) the appropriateness of the facilitators.

The results showed that (i) the design and structure of the online course was appropriate and well managed, (ii) the course delivery modes (Internet, CD-ROM, and face-to-face learning) were efficiently and effectively utilized, (iii) the course materials were challenging, (iv) the introductory activities properly prepared the learners, (v) the support provided by facilitators was very useful, and (vi) the reading materials in the CD were of high quality. Most of the learners viewed the online course worth taking.

However, most learners were frustrated by the low bandwidth which made it difficult for them to browse and surf the Internet and download PDF files. Some learners were not necessarily literate in computer use, opening and sending emails, and surfing the Internet. It is recommended that before an online course is offered, course providers should assess the profile of the intended learners, whether or not they have access to computers, Internet, and know how to open and receive emails as well as download files.

Keywords: Southern Africa, online learning, open and distance learning,

INTRODUCTION

One of the key drivers of the global knowledge and sustainable development in the world is capacity building in human capital. Unfortunately, Africa is the only continent in the world that has grown poorer over the last 25 years; and that has the largest number of people living below \$1 per day (Commission for Africa, 2004). Africa has also lagged behind in investing in human capital. For example, the African continent has the lowest enrolment rates in basic, secondary and tertiary education compared to the other continents (Commission for Africa, 2004). Yet education is the key to sustainable development and for competing in the global knowledge economy (World Bank, 2002). If Africa is to compete in the global knowledge economy, Africa must invest more on human capital. It was against this background that the Commonwealth of Learning (COL) supported an online training course for policy-makers working in open and distance learning (ODL) environments in Southern Africa.

The online programme was offered using the Internet and CD-ROM technology. The purpose of the online course was to provide learners with an in-depth understanding of ODL concepts as well as a range of policy issues associated with planning, developing, financing, managing and

evaluation of ODL within the context of national policy-making. Overall, the aim of the online course was to assist learners understand better the relationship between good quality ODL practices and enabling national policy frameworks and mechanisms.

WHY OPEN AND DISTANCE LEARNING?

The reasons for using ODL for human capacity building in the African continent are obvious. ODL, properly structured, is one of the many cost-efficient and effective strategies for providing human capacity building in developing countries. It has an edge over face-to-face education and learning. It is a powerful channel for reaching learners anywhere at the same time provided the necessary infrastructure, equipment, and expertise are available. ODL cuts across national and international boundaries, regions and continents of the world (World Bank, 2000). It caters for all types of people regardless of their age, gender, citizenship, social standing, commitment, social responsibilities, and geographical location (Rumble, 1992).

In addition, ODL is appropriate for (i) education of a large pool of people from different levels and types of education: basic, secondary, and tertiary; (ii) disadvantaged people who are unable to enter conventional education for a variety of reasons; and (iii) training or retraining professional, technical and vocational workers who want to upgrade and update their skills, knowledge and attitudes. ODL enables learners to study at their own time, any place convenient to them, and at their own pace (Verduin, 1992).

In fact, ODL (i) has the potential for cost efficiency and effective in terms of economies of scale (Naidoo, 2001); (ii) enables educational materials to be customized to suit local needs and priorities of learners (UNESCO, 2002); (iii) accommodates the growing demand for lifelong learning; and (iv) makes it possible for post graduate level courses in developed universities to be delivered in developing countries through the Internet (Saint, 1999). ODL minimizes the need for investment in costly physical facilities and their maintenance because, in most instances, existing institutional physical facilities are utilized. As enrolments go up in ODL, the cost per learner goes down resulting in the reduction of marginal costs.

Indeed, where ODL employs the modular approach, course materials are easily updated or modified to suit the type of learners. Where ODL courses are prepared by contracted classroom lecturers, ODL improves face-to-face instruction. As a matter of fact, by using standardized materials developed by subject experts, ODL promotes quality assurance and equitable educational provision (Verduin, 1992). Where good instructional materials for ODL exist, full-time learners and lecturers use them as study guides (Rumble, 1992; Saint, 1999). Overall, ODL "holds forth the promise of increasing access to education, improving educational quality, and more efficient use of limited resources" (Saint, 1999: 12), particularly in developing countries.

THE ONLINE TRAINING PROGRAMME

COL commissioned the South African Institute for Distance Education (SAIDE) to design, develop and launch the online course. The platform for offering the online course was the Internet and CD-ROM technology. It was designed in such a way that it allowed learners to register online; it tracked the nature of the relationships between learners and facilitators and the organizations with whom they were associated. The online course was offered to 17 learners. There were four course facilitators, and each facilitator was assigned some learners. The facilitators were expected to provide ongoing guidance and feedback to online learners. In order to access the online course, each learner and course facilitator allocated a username and password, and then assigned to online discussion groups.

Assumptions about the Learners

The course designer made several assumptions about the learners. The first assumption was that learners had a basic understanding of ODL, and thus required only a comprehensive overview of the various facets of ODL theory and practice. However, the course designer was cognizant of the fact that there could be variation in terms of the level of knowledge learners had about ODL. The second assumption was that learners had responsibility for defining national/institutional policies to govern ODL in their countries/institutions, but only needed support in understanding how these national/institutional policy processes could foster best educational practice.

The third assumption was that learners would have variances in terms of the number of years of experience in national/institutional policy-making. The fourth assumption was that learners would have access to reliable e-mail accounts, although some have insufficiently stable Internet, therefore not be able to access to materials online. The fifth assumption was that all learners would be proficient in reading and writing English. The sixth assumption was that learners had some experience in teaching and/or educational qualifications of some kind. While most of these assumptions proved correct, it was discovered that, even at this level of employment, some learners struggled to use or access the e-mail.

The online course materials provided fully searchable course environment, permitting searches based on document meta-tags and free-text searches. Learners worked on the online resources before and after the face-to-face workshop. Facilitators were charged with the responsibility of managing the online group groups. Interactive materials were posted on the online course, and facilitators were also charged with the responsibility of tracking the progress of online learners on specific learning activities against defined assessment criteria. Overall, the learners were provided with a comprehensive online support system. The online course lasted five months, including a five-day face-to-face training workshop.

Courseware Structure

Since the intention was to ensure as much flexibility as possible in the design and presentation of course materials, a CD was developed as an encyclopaedia resource for learners to navigate through in different ways. Thus, all supplementary readings and resources for the learners and facilitators were accessible in the CD separately from the course structure. On launching the CD, users were given two navigation options: (i) to navigate through the course itself, and (ii) to browse through supplementary materials which were provided as reference resources. In essence, learners accessed resources according to various subject categories without necessarily having to navigate through individual activities. In this way, it was hoped that the CD would remain useful beyond the completion of the course itself.

Resources in the CD were presented using a combination of HTML and Portable Document Format (PDF). To ensure accessibility to PDF resources, an Adobe Acrobat Reader was provided in the CD. Using this technology, it was possible to increase the volume of supplementary resource information in the CD without incurring the expense of HTML design. The CD layout is shown in Figure 1.



Figure 1: The CD layout. Source: Naidoo, V. Butcher, N. & Magagula, C.M. (2002).

Course Delivery Structure

The online course was delivered in three parts. Part one took two months; and it provided learners with a conceptual platform which enabled them to understand the implications of different policy choices regarding ODL. During this phase, learners accessed a full online course environment, comprising activities, support resources, links to other useful web resources, and ongoing e-mail engagement with online facilitators and a community of their peers. Continual feedback was provided via e-mail by course facilitators, while the course environment was designed in such a way that it was possible for facilitators to monitor the progress of learners up to the run up of the five-day face-to-face workshop. Facilitators also supported learners through ad-hoc telephonic interaction. Part one accounted for roughly 40 notional hours of learning. To

ensure that access to resources was streamlined, and learners received all the required course materials course on a CD-ROM.

Part two of the online course was a five-day face-to-face intensive workshop. The five-day faceto-face intensive workshop focused on interaction among and between learners and facilitators. It provided learners with an opportunity to work through practical activities, share experiences and problems with their peers, and shape the learning environment so that it met their specific requirements. Part two comprised a further 40 notional hours of learning. Part three was similar to part one. It followed immediately after the five-day face-to-face intensive workshop. It continued for a further three months. Likewise, part three comprised of another 40 notional hours of learning. The whole online course constituted a total of 120 notional hours of learning.

COURSE EVALUATION

COL commissioned the author to evaluate the online course during and after the course offering. It was expected that by the end of the online course, learners would have understood the processes of articulating, implementing, and evaluating policies for supporting ODL practices. This was to be reflected by the learners' ability to (i) analyze a given educational context; (ii) develop a vision for opening and distance learning in a given educational context; (iii) construct practical, realistic educational opportunities that met the requirements/needs of a given educational context; (iv) define management of, and resource-needs for, implementing such educational opportunities; (v) develop a policy that would articulate realistic achievements of a policy vision within an analysed context; and (vi) analyze changing roles of policy implementers and evaluators.

Subsequently, the author was contracted to determine whether the online course increased learners' understanding and knowledge of policy development processes and whether the delivery strategies were efficient and effective. The author was requested to focus on the worthiness of the three aspects of the course delivery: (i) online delivery using internet (email facility and the CD), (ii) the one week face-to-face workshop, and the two weeks post workshop period. Also, the author (course evaluator) was expected to evaluate (i) the management process leading to the development of the course, (ii) the use of the SAIDE website and online discussions, (ii) the online course materials, (iv) the user-friendliness of the online system, (v) the worthiness of the different types of support systems, and (vi) the learners' views of the online course. The face-to-face evaluation was expected to cover (i) the quality of the workshop structure, (ii) process and materials used, (iii) the integration of the workshop with the online course, (iv) the value of the workshop for the learners, and (v) the appropriateness of the facilitators.

METHOD OF EVALUATING THE ONLINE COURSE

A soon as the online course was launched on the SAIDE website, the course designer and developer the evaluator (the author) with the list of learners, their email addresses, and the group email address, the SAIDE website, and the CD. The evaluation focused on the three phases of the online course: (i) the pre-workshop period, (ii) the one-week face-to-face workshop, and the post workshop period. The methods for evaluating the online course included questionnaires, interviews, and analysis of documents, email messages, and learning activities covering the aspects of the terms of reference. The author received all the emails exchanged between and among the learners and course facilitators. Thus, he was able to monitor the contributions of the learners and course facilitators. Also, the course evaluator was able to assess the quality of the

discussions, assignments completed by learners, and the pace at which learners were progressing on the online course.

The questionnaire was administered by the author to the eighteen (18) learners who attended the one-week face-to-face workshop and four course facilitators. Also, the author conducted formal and informal interviews covering the period prior to the one-week face-to-face workshop. Only 17 course learners and one course facilitator successfully completed the questionnaire. One learner was unable to complete the questionnaire because he was in and out of the workshop.

The questionnaire and the interviews covered learners' level of anxiety and excitement about the online course, level of preparedness for the online course, degree of computer literacy, knowledge and skills of using a computer, surfacing the Internet, and opening and sending emails, access to computing facilities and Internet, and the quality of computer facilities. In addition, the questionnaire sought to determine the usefulness of instructions and advice in the CD: instructions and advice associated with course delivery, sending emails, making use of the help files on CD, and participating in the group discussions. The questionnaire and interviews also asked learners to indicate the problems encountered whilst undertaking the learning activities, and how such problems could be resolved in future

Questionnaires were administered online through emails and at the one-week face-to-face workshop. Both the formal and informal interviews were conducted at the one-week face-to-face workshop as well as telephonically. The questionnaires contained both structured and openended items. Data was analyzed using both quantitative and qualitative methods.

FINDINGS OF THE EVALUATION

The general impression of the author was that the online course was well conceived and managed. The layout was simple and easy to follow. The hyperlinks were clear, directive, simplified and easy for learners to navigate. The learning activities were challenging, stimulating, and relevant to the social context and work environment of learners in the SADC region. The task activities learners had to complete attempted to tap, enhance and build on learners' work experience as they depicted life situations.

Level of Anxiety

When individuals are exposed to a new task, usually their level of anxiety rises up because of the unknown future about whether or not the tasks will be successfully handled. Naturally, it was anticipated that since the mode of delivery of the online course was new to most of learners, most of them would be anxious at the beginning of the course and then later in the course, their level of anxiety would dropped. Therefore, one of question that learners were asked was their level of anxiety before and after the three weeks of taking the online course.

Analysis of the data showed that at first most learners were anxious about the online course prior to its commencement. Figure 2, for example, shows that before commencing the online course, the number of learners who were *very anxious* about the online was 12 compared to only 1 who was *least anxious*. The rest of 4 learners were somewhat anxious. In short, out of the 17 online learners, 16 (94%) were *anxious* about the online course and 1 (6%) was least anxious about the online course.

However, after three weeks of participation in the online course, the level of anxiety of most learners dropped. As reflected in figure 2, for example, the number of learners who were still

anxious about the online course dropped to one quarter (i.e. 4 learners), presumably because they had gained confidence in using the CD and computers.



Figure 2: Level of Anxiety of the Learners before and after Three Weeks in the Online Course (N = 17)

Learners were asked to explain why they were *anxious* about the online courses before it started. The reasons put forward by the learners why they were anxious about the online course at the beginning of course included, among others, the realization of the high volume of work to be done, the large quantity of recommended reference materials to be read, the tight schedule for completing the assigned activities in the CD-ROM, being behind the course schedule, failing to keep pace with the demands of the course, inability to complete the assigned learning activities on time, and not having started working on the assigned learning activities. Below are samples of learners' remarks.

I am still very anxious because I have a lot of things to read and to do in the CD-ROM (learner 1).

I still feel very anxious because I need to learn more and understand policy development processes (Learner 2).

I am very anxious because I have not had time to make my input, but I have benefited and enjoyed the first email responses from other learners (Learner 3).

I am somewhat anxious because the time available makes it difficult for me to keep pace (Learner 4).

I am still somewhat anxious because before coming to the face- to-face session I had hardly started the course. Although I don't feel I am far behind, I still feel I am disadvantaged and want to do the earlier exercises (Learner 5).

The reasons put forward by the learners why they were *not anxious* about the online course at the end of three weeks ranged from finding the course user-friendly, interesting and enjoyable to clarity of instructions for the activities, the course meeting learners' expectations, communication with other learners through emails, and completion of learning activities. Below are few examples of the learners' remarks.

I am not anxious now because the course is interesting and I am convinced that my expectations are being met; hence I am enjoying it (Learner 1).

I am not anxious at all now because I enjoy the course and it is an eye-opener (Learner 2).

I am not anxious now because of the relaxed approach and the user-friendly process of learning through online (Learner 3).

I am not anxious because the approach is good and *I* can communicate easily with other learners and get feedback from the tutors (Learner 3).

I am not anxious now because I am familiar with the course objectives, and the challenges built into the course are motivating and exciting (Learner 4).

Computer literacy

One of the key aspects of an online course is the level of computer literacy of the learners. For this online course, it was imperative that learners did have basic knowledge and skills to successfully undertake the online course. The course designer and developer had assumed that learners were computer-literate and had basic computer knowledge and skills to manipulate a computer, write emails and surf the Internet.

Against this backdrop, one of the questions of this study asked learners to rate their level of computer literacy on a scale of *above average*, *average*, and *below average*. This study operationally defined computer literacy as learners' level of knowledge of, and ability to, use a word processing package, compose and send an email, browse the Internet, and view and browse the CD. Figure 3 indicates the level of computer literacy of the learners as rated by them.

Figure 3 indicates that of the 17 learners, the level of computer literacy of the majority of learners regarding word processing and viewing/browsing the CD respectively, was *above* average. On the other hand, the level of computer literacy of the majority of the learners regarding composing/sending email messages and browsing for information in the Internet respectively was *below* average.



Figure 3: The Level of Computer Literacy of the Learners Enrolled in the Online Course (N = 17)

Of the 17 learners, for example, 12 (71%) and 11 (65%) indicated that their level of wording processing and viewing/browsing the CD respectively was *above average*. Similarly, of the 17 learners, 10 (59%) and 11 (65%) indicated that their level of literacy regarding composing/sending email messages and browsing for information in the Internet respectively was *below* average. In a nutshell, the level of literacy of most learners regarding word processing and browsing the CD was relatively high. However, their level of literacy regarding composing/sending of email messages and browsing the Internet appeared to be relatively low.

Access to a Computer

Access to a computer and the necessary browsers is a also critical component of providing an online course. Indeed, another assumption of the course designer and developer was that learners would have adequate time to access computers that had the necessary capacity and software for the course. One of the research questions was to ask learners the extent to which learner had access to a computer with the necessary capacity and software to undertake the online course, the owner of the computer, the period at which they accessed the computer, and the model of the computer. Analysis of data from this question is summarized in Table 1.

First, Table 1 indicates that of the 17 learners, 16 (94%) had access to computers for the online course. Only one (6%) learner had no access to a computer at all. Second, of the 16 learners who had access to computers, 13 (81%) used institutional computers to access the online course, whilst 3 (19%) used both institutional and their personal computers to access the online course. In other words, only 3 learners had personal computers.

Third, of the 16 learners who had accessed to computers, 5 (31%) learners shared them with other people, whilst 11 (69%) learners did not share them with anyone. Fourth, of the 16 learners who had access to computers, 9 (56%) learners could access the computers for the online course at anytime, whilst 7 (44%) could only access them during working hours. In summary, the majority of the learners did not have personal computers, but did have access to institutional computers which they did not share with anyone, but used them for the online course at anytime convenient to them.

Variable	Learners (%)
Access to a computer	
Yes	16 (94%)
No	1 (6%)
Owner of a Computer	
No computer	1 (6%)
Personal computer	0 (0%)
Institutional computer	13 (77%)
Both personal and institutional computer	3 (18%)
Computer shared	
Yes	5 (31%)
No	11 (69%)
Time computer accessed	· · · · · ·
During working hours only	7 (44%)
After working hours only	0 (0%)
Anytime	9 (56%)

Table 1: Access	, Ownership,	and Sharing	g of Com	puter for the	Online	Course	(N =17))
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Computer Models

Apart from having access to a computer or owned one, it was important that learners had the appropriate model of a computer that would have the capacity (memory and bandwidth) and software to access the online course. In lieu of this fact, learners were asked to indicate the model and features of the computers they used to access the online course. Specifically, learners were asked to indicate the computer brand: that is, whether or not it was a 486, a Pentium, Pentium 2, Pentium 3, or Pentium 4, MacIntosh. In addition, learners were asked to indicate whether the computers had a CD-ROM drive, an Internet connectivity, and email facilities. Figure 3 shows their responses to these questions.

A closer examination of figure 4 shows that of the 17 learners, 8 (47%) learners had no idea at all about the model of the computer they were using to access the online course. One learner had a 486 computer, two learners had Pentium 1 computers, two learners had Pentium 2 computers, two learners had Pentium 3 computers, one learner had a Pentium 4, and one learner had a Macintosh. In fact, given this data it was not easy to conclude whether or not the 8 learners who had no idea of the model of the computers they were using were: either the 486 computers or Pentiums I, II, III, IV. Similarly, it was not possible to conclude whether or not the computers they used to access the online course were relatively "new" or "old".



Figure 4: Model and Features of the Computer Used for the Online Course (N = 17)

Notwithstanding this observation, learners were asked if the computers they used had a CD-ROM Drives, were connected to the Internet, and had an email facility. Figure 5 shows that of all 16 learners who had provided data for this question had computers that had CD ROM drives that could read the CD the resource materials. Similarly, out of the 16 learners who provided data for this section, 14 learners (88%) had computers that had Internet connectivity and email facility. In addition, the 14 learners knew how to use the email facility.



Figure 5: Computers with CD-ROM Drives, Internet Connectivity, and Email Facility

Learners, however, expressed frustration at the slowness of their computers in accessing the online course at the SAIDE website. The explanation could be that the bandwidth of the learners' computers was low and could not accommodate PDF files. In fact, most learners complained that they had difficulty in down-loading and opening PDF files and/or sending file attachments through emails.

On the other hand, most learners found the instructions in the CD related to the purpose, content, structure, expected outcomes, and mode of delivery of the online course very helpful. They had no difficult following them. The comments and feedback they received from colleagues and/or course facilitators were also very helpful, encouraging, supportive, constructive, and confidence-building.

Online discussions, however, were not fully utilized as expected despite facilitators' efforts and encouragements. Pertinent issues raised through discussions were often not followed through to their logical conclusion. It was not clear why it was so. It could be that learners were not used to such discussions and/or did not invest much time on this activity since they were all working and therefore very busy people. The online system, in the opinion of the author, was very user-friendly.

Workshop

Concerning the face-to-face workshop, most learners felt that facilitators clearly stated the workshop objectives. In the learners' opinion, the quality of the content and the way facilitators presented it at the one week face-to-face workshop was quite good. They felt that the physical conditions of the one week face-to-face workshop and logistical arrangements were also good.

The author was also of the opinion that the workshop activities met learners' expectations in terms of the time allocated to the various workshop activities, the quality of the handouts, audiovisual equipment, and the pace of facilitators' presentation. The workshop activities were neither very demanding, nor very light. However, most learners felt that the workshop session on budgeting for an ODL programme was inadequately covered, and recommended that more time should have been spent on it. The time provided by facilitators for active participation, practical activities, and group discussions were sufficient.

The aspects of the workshop perceived by learners 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 on ODL, 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, linking vision to policy development, and designing and evaluating a policy framework for ODL programme. Indeed, the views of the learners were that the course content, handouts, supplementary readings, assigned activities, and course delivery format (i.e. online and face-to-face workshop) were *critical* features for the success of the online course. Furthermore, most learners expressed satisfaction with the online course and that it met their expectations.

Efficiency and Effectiveness of the Online Course

The concept *efficiency* means being able to work well and without wasting time or resources. In the context of the online course, cost efficiency would therefore imply the extent to which time and money budgeted for this course was used for the purpose of which it was budgeted for. The concept *effectiveness* implies the desired impact or expected outcome of an event. Again, in the context of the online course, cost effectiveness would imply the extent to which the money used to fund this course had the desired impact or expected outcomes.

Although these concepts imply different things, they are not mutually exclusive. In the context of the online course, two questions were asked. The first question was: To what extent was the money budgeted for the online course used efficiently? The second question was: To what extent was the money budgeted for the online course produced the desired impact or expected outcomes? In other words, was the online course successful in meeting the intended objectives?

Regarding the question of efficiency, the course evaluator, unfortunately, was unable to look at the financial records of the managers of the online course due to time constraints. Therefore, it was difficult to judge whether or not the budget allocated for the online course was efficiently used. With respect to the second question of effectiveness, and judging by the completion rate, the quality of the online discussions, and the amount of knowledge and skills learners learned as reflected in their email exchanges, online assignments, and participation in the one week one-day workshop, one concluded that the online course was a success and met its intended outcomes.

At the time of compiling this report, for example, out of the 17 learners who registered for the online course, 9 (53%) had completed the course. Also, of the 17 learners 4 (24%) had no access to computers and 2 (12%) were computer illiterate. In essence, the completion rate for this course was approximately two-thirds (64%). However, it is likely that the completion rate increased in view of the fact that at the time of compiling this report, few learners were still expected to submit their last learning activity. In fact, the completion rate may have been higher than this had the nomination and selection criteria only allowed learners that were computer literate and had access to computers with high bandwidth internet connectivity and CD-ROM drives. The comments of one of the facilitators perhaps support this view:

Participation rates and the quality of input including the feedback already received on the first round of online engagement plus the workshop, suggest that people have found it useful and it has helped them to engage in key problems. Also, it is important to remember that this is a pilot, so we have succeeded in testing the viability of this mode of delivery. Here, we have learned that the key to success is that people should have functional email (Facilitator 2).

SUMMARY

In summary, the view of the author is that the various aspects of the online course which contributed *most* to the learners' learning included (i) the design and structured of the course, (ii) the challenging nature of the course materials, (iii) the introductory activities which prepared the learners, (iv) the one week face-to-face workshop, (v) the support provided by facilitators, and (v) the quality of reading materials in the CD. Indeed, most of the learners were of the viewed that the online course was worth it because it enabled them to acquired knowledge and skills on policy articulation, financial management and general administration of ODL.

That learners did acquire knowledge and skills on online learning and the dimensions of policy development process was evident in the quality of the learning activities shared through the emails. An analysis of the submitted learning activities and reflective comments showed learners' high level of understanding and articulation of the key dimensions of policy development processes. This came clearly in the learners' submissions of their countries' policy framework for ODL. The submissions demonstrated that learners had clear understanding and articulation of the stages of policy development processes (vision, mission statement, strategic objectives, and strategic outcomes) and the strategic processes (advocacy) to achieve the intended outcomes.

On the other hand, the aspect of the online course which few learners felt contributed *least* to their learning was failure, on their part, to send emails which kept on bouncing back. This in turn led to their inability to participate fully on online interactions with other learners. They attributed this failure on their inability to use the email technology. In light of this finding, it would perhaps be useful for course designers and developers of the online course to include, in the orientation or introductory section, a unit on how to use an email (open, read, compose, and send emails). Indeed, one possible practical work for learners may be completing an assignment which will indicate their level of literacy in using the email facility.

RECOMMENDATIONS

Based on learners' and course facilitators' views and feelings as well as the author's observations, the following recommendation were made: (i) that the two modes of course delivery (online and face-to-face) be retained, (ii) that the topic on financial management be given more time and attention in future in light of the fact that it did not receive adequate time and attention at the one week face-to-face workshop, and (iii) that in future people enrolling in this course should be computer literate, and have access to computers and the Internet facilities with at least a moderate bandwidth capacity. However, learners that have no access to Internet connectivity and computer facilities at all should be provided with printed materials. Learners who fail to complete pre-face-to-face activities should not be allowed to attend the face-to-face workshop. In short, they should be discontinued from the course.

The author recommended that course facilitators should regularly check if the learners' progress online was in accordance with the intended objectives of the online course. Most of the learners were of the view that the time for offering the online course was inappropriate as it was close to the festive season (November, December and January). In view of this observation, the author recommended that in future the online course should be offered between June and August, not towards the end of the year because everyone seemed to be very busy trying to meet deadlines at the workplace and also looking forward to the festive season.

The use of assigned learning activities and templates for writing responses should be retained since most learners found them to be very helpful to complete the tasks. Course facilitators tended to ignore the issues raised by peers in emails group discussions. It was not clear why this

was so. The author recommended that course facilitators should monitor and indeed respond to issues raised by learners in email discussion groups as well as guide the discussions so that the intended course objectives are achieved.

Finally, the author noted that there was less vigour from course designers and developers in assessing the level of computer literacy of prospective learner, particularly when it came to the use of the email facility. In light of this, the author recommended that in future course designers and facilitators should assess the level of computer literacy of prospective learners, the quality of Internet connectivity including the bandwidth capacity, and availability of CD-ROM drives in the computers. This assessment will assist course designers and developers of online course adjust the delivery methods according to the learners' level of computer literacy and ability of the computer facilities to efficiently use the courseware.

CONCLUSION

The online course had enabled policy makers in Southern Africa acquire knowledge and skills on ODL. Generally, the use of ICT to deliver the course was a success and worth the investment. This method of course delivery can open new modes of educational course delivery elsewhere in developing countries with appropriate infrastructure and technology. This mode of course deliver, in the opinion of the author, is likely to increase human capacity building throughout the developing world. However, there is need for proper planning and assessment of learners' level of computer literacy, the extent to which they would access computers, and the capacity of the computers to handle the course delivery courseware. There is also a need to check out the Internet accessibility as well as the broad band Internet before the online course is launched so that learners are not frustrated. Properly planned, this model of course delivery could be used to provide similar online course in other regions of developing countries, thereby increase capacity building.

The major challenge facing most developing countries in benefiting from online courses of this nature is access to broad bandwidth connectivity (Naidoo, 2001). This challenge hinders not only offering online courses for capacity building in developing countries but also researchers and librarians from accessing up-to-date databases for teaching and research purposes. The fact of the matter is bandwidth in developing countries is expensive to the extent that African universities, outside of South Africa, are paying over \$55,000 per months for 4mbps inbound and 2mbps outbound, which is 100 times more expensive than equivalent prices in North America or Europe (INASP, 2003).

This challenge is definitely disadvantaging developing countries from participating in the global knowledge economy and human capital production. African scientists and researchers are finding is extremely difficult to keep abreast with developments in their areas of specialization simple because they cannot link up, collaborate, and dialogue with their counterpart scientists in developed countries (INASP, 2003). There is an urgent need to explore strategies that could be used to address this challenge.

Endnotes:

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