



Open and Distance Learning in Southern Africa

A collection of
papers compiled
for the Distance
Education of
Southern Africa
(DEASA)

Editor: Tony Dodds

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Open and Distance Learning
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Editor's Introduction

Background: a historical note

Distance education, or at least its predecessor, correspondence education, has been around in Southern Africa for a very long time. As the final article in this collection points out, the University of South Africa (UNISA), the giant in the region, started its first correspondence courses in 1918 and became a full-scale correspondence university in 1951. Today it is seen as one of the world's 'mega-universities'.¹ As in much of the rest of the Western world, private commercial correspondence colleges, such as Rapid Results and the Central African Correspondence College, dominated the pre-university scene for much of the twentieth century. As a result of South African apartheid policies and the consequent academic boycott of the regime, most of these were untouched for many years by the new developments in the field, such as those pioneered by the National Extension College and the Open University of the UK and a variety of universities and colleges in Australia in the early seventies. These led to the introduction of the names *distance education* and *open learning*, which began to have dramatic effects on such programmes in Australasia, Europe and the United States, the emphasis being placed on educational equity and quality rather than commercial profit.

These international trends affected the development of correspondence and distance education in other countries of the region with the establishment of government correspondence colleges in the mid-1960s and the creation of the University of Zambia as a dual-mode university from its foundation (see the third article in this volume). Similarly, with the founding of Botswana Extension College (BEC) in 1972, and the setting up of the Lesotho Distance Teaching Centre (LDTC) in 1973, the direct influence of the UK movement towards quality, openness and the use of combined media began to be felt. Even in South Africa, as part of the liberation struggle, the South African Committee for Higher Education (SACHED) adopted these approaches to providing the black population with opportunities for non-apartheid education at all levels through distance education. As early as 1974 several of these new institutions, in particular BEC, LDTC, the Swaziland International Education Centre (SIEC) and SACHED, joined together with the extension departments of the then combined University of Botswana, Lesotho and Swaziland to create what proved to be DEASA's predecessor, Botswana, Lesotho and Swaziland Correspondence Committee (BLSCC). This was to be, and remains, a

professional association through which the institutions of the smaller countries could gain strength through mutual exchange, maintain contact with the outside world and, at least initially, hold at bay the dominance of the South African giant, UNISA. In at least two transformations, BLSCC became first the Distance Learning Association (DLA), incorporating institutions from South Africa and Namibia, and is now the Distance Education Association of Southern Africa (DEASA) for which and through which this volume has been put together. At the time of publication two important new developments are in progress: DEASA is seeking to extend its membership to include institutions from all the countries in the sub-region; and it is establishing a permanent secretariat, which, with the irony of history, is to be housed at UNISA.

Background to the publication

This publication has been a long time in the making. The first idea for a collection of occasional papers from DEASA arose in discussions about the nature and purpose of DEASA's well-established but faltering newsletter. It was recognised that one problem that made it difficult to produce the newsletter was a confusion between academic and professional articles and news about developments in the region. It was agreed to separate the two and to produce this volume of occasional papers to fill the need for academic and professional articles separately from the newsletter. This agreement was reached in 1999. It took at least two years, however, to obtain promises of enough articles from the members to justify publication. The processes of having the abstracts approved, external editorial advisers or referees appointed, and the articles written and edited through several drafts have taken another two years and the process of having the book published a further two years. Some of the articles were originally written as much as five years ago and have become somewhat dated. Rather than ask the authors to update their articles and run the risk of further delays, an attempt is made in this introduction to provide a few notes where these are felt to be necessary. It is hoped that, in spite of these delays, the collection will offer a broad, useful and interesting picture of the development of open and distance education in Southern Africa.

The original unifying theme suggested for the articles was 'How open is distance education in Southern Africa?' As will be seen through reading the articles, this theme is applied only indirectly. It is clear that openness is not a dominant characteristic of many of the programmes that are discussed. Issues of openness, however, do arise from time to time and I will return to the theme in

the closing chapter, which attempts to draw some conclusions from the collection as a whole.

There are ten articles in the collection, three of them co-authored, giving a total of thirteen contributors. The contributors themselves come from eight countries; the programmes they discuss are situated in only four of the countries, though two articles are essentially sub-regional in content. All but one article discusses mainly university-level programmes, and only one looks at a programme of adult basic education. It is to be regretted that two of the DEASA member countries, Botswana and Lesotho, are not represented and so many of the pre-university programmes in the region (which are similar in number to the university programmes) are not discussed. One of DEASA's commendable features is that it has always brought together university and non-university educators. It is perhaps in the nature of education internationally that university staff are under pressure to write to survive, whereas professionals who work at other levels are not put under the same pressures.

The articles: an overview

The ten articles in the collection are divided, somewhat arbitrarily, into two main sections. The first section, consisting of five articles, is concerned with the impact of open and distance learning (ODL) on increasing access to educational opportunity at various levels, including initial professional development in ODL. The second section, also comprising five articles, takes a somewhat more theoretical and experimental approach to the nature and methodologies of ODL. It opens with two articles on teaching methodology in ODL; these are followed by three articles that address the crucial issue of the provision of student support services to meet the special needs of different kinds of long-distance learners.

As is appropriate for a collection of papers from the Southern African sub-continent, the first article, by Evelyn Nonyongo and Mary-Emma Kuhn, reports on the evaluation of the Certificate for Distance Education Practitioners (CDEP), run by UNISA in collaboration with, and for, the member institutions of DEASA. This project, and its evaluation, as reported here, has two points of special importance for this collection. First, it is the only project in the collection that is intentionally international (or at least regional) and collaborative in scope. Second, as is clear from the evaluation, the CDEP provides effective initial professional development for distance educators, thus contributing to the improvement of quality of those distance education

programmes whose staff are being trained by it. By making the programme available to practitioners throughout the region, and by helping to improve the quality and effectiveness of other programmes in the region, the CDEP is contributing to 'increasing overall access to quality distance education in the region'. Significant plans are now in hand to implement two of the major recommendations: internationalising the content as well as the coverage of the programme; and revising, supplementing and upgrading it so as to make the certificate an initial step in a clear career path that gives entry to diploma, bachelor's and master's degree progression.

Article 2, by Haaveshe Nekongo-Nielsen, is about the use of ODL for adult basic education. It describes the establishment and development of an action research project with cattle farmers in North Central Namibia. The project was designed to experiment with appropriate and affordable media to identify ways of providing increased access to non-formal education to adults in rural areas. The article was written before the project was implemented and describes how it was devised, designed and developed. The pilot project it describes was run successfully at the end of 2001 and has been thoroughly evaluated since then. The lessons that were learned are now being studied by the University of Namibia and the Ministry of Agriculture of Namibia with a view to its replication on a wider scale.

Apart from UNISA perhaps, the University of Zambia was the first university in Africa to commit itself from its foundation to the provision of opportunities for university studies both by conventional face-to-face methods and by distance education. Its history, as briefly described in the article by Professor Richard Siaciwena, has not been without problems. This article reports on a project to address many of these problems through the introduction and application of modern information and communication technology. The original commitment of the University of Zambia to correspondence education was about increasing access to university education in newly independent Zambia. In terms of numbers, this commitment was thwarted by resource problems common to universities in many developing countries. The evaluation of the project described and analysed in this article examines how modern IC technology can help to overcome, or at least minimise, these problems through the application of ICTs to administrative functions such as information management, though Professor Siaciwena cautions that 'using ICT for direct teaching, such as on-line courses, computer-assisted learning, down-loading course material at provincial centres or direct, individualised, e-mail interaction

between students and lecturers may not be realistic in the Zambian context at this time’.

The next two articles, which complete this section, are about the University of Swaziland’s (UNISWA) distance education programme. First Jeckoniah Odumbe describes in some detail how the programmes of UNISWA’s Institute of Distance Education (IDE) are organised and implemented. He describes the academic programmes offered through the IDE, the administrative structure of the institute and the component parts of the teaching-learning system. He brings out clearly the interdependence of the institute and the university’s teaching faculties in the development and delivery of the programmes. He stresses the crucial importance of the training and orientation provided by the institute to the university in the maintenance of quality control. He concludes by identifying some of the constraints that have limited the full development of the programmes to date, constraints that will be all too familiar to all who have been involved with similar projects, and by pointing out the prospects of building on the foundations already established to provide much greater access for the people of Swaziland to university education in future. The article by Professor Cisco Magagula and Mr Ngwenya reports on an evaluation study of the UNISWA distance education programmes the authors carried out in 2000. Its main purposes were to examine the comparative profiles of UNISWA’s full-time students and distance education students, to compare their academic progress and achievements on their respective programmes and to identify the advantages and disadvantages both cohorts perceived as belonging to these modes of study. One somewhat surprising finding was that the profiles of the two groups do not differ significantly, showing that UNISWA’s distance education programme is increasing access for secondary school leavers in Swaziland to university studies, though it would appear that it is not reaching in large numbers the more usual working adult audience of distance education. The finding that distance students performed academically as well as or slightly better than their internal full-time colleagues is equally important and perhaps more so in the long run.

The second part of the book is made up of five articles that concentrate on the nature and methodology of teaching and learning at a distance, especially at university level. Most of these articles, with the exception of the UNISA experience, are based on the programmes offered by dual-mode universities in the region, that is, universities that offer conventional, full-time face-to-face programmes and, in parallel, part-time distance learning programmes. The first two of these take a somewhat theoretical approach to analysing teaching methods.

For much of the last decade an important discussion in distance education circles has been about distance learning merging with conventional education, or joining the mainstream of face-to-face institution-based learning. In his article Pedro Lusakalalu analyses the programmes offered by the University of Namibia that are affected by distance education methods or materials. He does this in order to identify different levels of dual-mode status or the different extents to which the university combines or differentiates between the courses offered in the conventional face-to-face mode and by distance education. The criteria by which he establishes such levels are:

- How do the students study?
- Who does the teaching?
- Who uses the distance learning materials?

In this way he provides an important tool to help us to assess the merger with the mainstream and the impact of distance learning on expanded access to and the quality of university education.

Professor Stanley Mpofu challenges us to re-examine some of the basic concepts on which the teaching methodology of distance education has traditionally been constructed. He draws attention to the importance given to the theory that distance learners are by nature and by choice independent learners when they enrol for their programmes. He shows that this is a fundamental misconception that may account for the high failure and drop-out rates often associated with distance education. He points out the importance for all learners, especially adult learners, of starting where they are, with what is familiar to them, and in the context of 'previously acquired learning strategies'. The challenge to distance educators is to help students to become independent learners and to acquire the skills and confidence to do so, often in spite of previous learning experience. Professor Mpofu makes the somewhat controversial assertion, at least to distance educators such as myself, that traditional lecturing is the most effective method of teaching, that it is a teaching form with which most of our learners are already familiar and therefore there should be a significant role for the traditional lecture, at least, that is, for the good lecture, in the early stages of distance learning programmes. Good lecturing, possibly extended through the new technology of video-conferencing, could be a significant way of helping students to make this transition to independent learning.

The last three articles examine ways of providing support to student learning in distance education as a vital complement to the technologies of teaching at a

distance. Article 8, by Hennie Beukes, reports on research carried out a few years ago on factors affecting the academic performance of rural distance students at the University of Namibia. He categorises these factors into personal, environmental, institutional and academic. His article concentrates on the environmental factors that inevitably have a huge impact on distance students who live in rural areas in a country such as Namibia. His findings are somewhat sobering. How can students remain motivated and be successful when studying in such a deprived environment? He concludes by stressing the importance of student support systems that are appropriate in such an environment and can give students real opportunities to be successful.

Article 9, by Delvie Möwes, is also based on research with UNAM distance students, though she covered a wider range of programmes and more recently. Her findings complement and update those of the previous article. These articles both illustrate the different kinds of audience that various distance programmes reach, even in the same region. UNAM's students are all working adults. In Delvie Möwes's study two characteristics stand out. The first is that the students have very limited access to technology, especially telephones and, even more so, computer technology. But UNAM's distance students are predominantly solid middle-class students, teachers, nurses, and business people. How much less access to such technology will students of lower educational and social strata have? The second is the difficulty most students experience in physically making use of the support services provided by the university's network of nine regional centres. A total of 70% of students live more than 20 kilometres from their nearest centre, and nearly 20% more than 100 kilometres away; very few have their own transport to take them to activities in these centres. Clearly, 'it is evident that the profile and needs of distance learners justify the provision of individualized support [and by implication, support to small self-help study groups which the students might be able to form]. There is a need for further research on the way students actually organize and execute their studies within the personal contextual factors they have identified as barriers to their studies.' Only on the basis of continuing enquiries of this sort can effective student support services be institutionalised.

Johnnie Hay and Paul Beneke take this conclusion further. They report on a series of studies they carried out at the Vista University Distance Education Campus (VUDEC) in South Africa between 1989 and 1998. These studies set out to create profiles of various cohorts of students. In particular they look at how student counselling services could be designed to meet the needs of the students whose profiles they were examining. They also look at biographical,

personal, educational, professional and study characteristics as the basis for proposing a model of student counselling. They point out the inadequacy of most current student counselling systems in South Africa in the light of the profiles they draw, primarily because those counselling systems are devised for traditional face-to-face students. The model they propose has three crucial elements: it stresses the need for continuous flexibility of counselling provision; it draws attention to the need to enlist the services of community-based resources as auxiliary services to those the university can provide; and it indicates the need for continuous profiling of the sort they carried out in order to keep up to date with the changing needs of students.

Note

- 1 J. Daniel, *Mega-Universities and Knowledge Media: Technology Strategies for Higher Education* (London: Kogan Page, 1996).

An evaluation of the Certificate for Distance Education Practitioners

Evelyn P. Nonyongo and Mary-Emma Kuhn

Introduction

Formal programmes for the professional development of open and distance learning (ODL) practitioners are emerging areas of interest and provision. This interest emanates from the potential for increasing access to professional development and eventually improving the quality of ODL provision. It is not surprising that staff development activities under various names, for example orientation, briefing, training, staff development or professional development, are conducted in most ODL institutions. There is also recognition that these capacity building activities are needed in all categories and levels of staff¹ irrespective of whether they are full time or part time. The Southern African Development Community (SADC) Protocol on Education and Training,² for example, endorses the need for staff development and training in distance education, promotes collaboration in such activities, and encourages the development of regional professional associations to enhance quality in distance education:

Members agree to promote cooperation among distance education institutions in the region in the design, production and dissemination of distance learning materials, in the training of distance educators and trainers and in teaching some of their programmes.³

Member States agree to encourage and support the creation of regional professional associations in distance education and exchange of personnel through which the institutions shall share ideas, views, experiences to enhance the quality and relevance of their programmes.⁴

In Southern Africa, the increase in the number of institutions offering distance education programmes, the increase in learners opting for this method for furthering their studies, and the limited pool of distance education practitioners with the necessary knowledge, skills and attitudes are some of the reasons for opening up access to professional development. While in-service training has been provided in most institutions in these forms, this has been neither

systematic nor consolidated. Until the 1990s, there were no formal courses for the professional development of distance education practitioners within the South African Development Community (SADC) region. The Certificate for Distance Education Practitioners (CDEP) was the first formal programme to be offered in this region. An evaluation of its impact should provide valuable lessons for similar programmes.

CDEP background

CDEP is a collaboration between the Institute for Continuing Education (ICE) at the University of South Africa (a public higher education institution) (UNISA), the South African Committee for Higher Education (SACHED) (a non-governmental organisation) and the Distance Education Association of Southern Africa (DEASA) (a regional association) in partnership with the Commonwealth of Learning (COL). CDEP is described in the SACHED-DETU/UNISA-ICE documents as a 'foundation course for distance education practitioners' to introduce them to 'distance education as a method that can facilitate open access to education and training'.⁵ It aims to provide an orientation to distance education and in this way contribute to the professional development of distance education practitioners. It is described as a course that will help practitioners to 'develop the professionalism that distance education demands, also whet their appetite for further study in the field of distance education' and 'put into practice newly developing knowledge, skills and attitudes'.

CDEP documents identify the following groups of distance education practitioners as the target audience of the course: tutors, counsellors, field-workers, administrative staff and community learning centre coordinators or facilitators. These groups are said to be working in 'distance and open learning programmes such as night schools, industry and non-governmental distance education and community education initiatives'.⁶

Evaluation methodology

CDEP's contribution to the professional development of distance education practitioners was evaluated via structured questionnaires with closed and open-ended questions. These questionnaires were posted to the three groups of CDEP stakeholders (learners, institutions and tutors) that participated in the programme between 1997 and 1999. A specific questionnaire was prepared for each of these three groups of respondents. In addition to demographic questions regarding job description, years of experience in present organisation

and year/s of participation in CDEP, questions were asked about reasons for participation and the extent to which these reasons were met; the relevance/non-relevance of the course; major strengths and weaknesses; and recommendations for improvement of the course. Questions relating to participation, relevance, strengths, weaknesses and improvements were all open-ended questions, allowing respondents to speak freely in their own words.

Questionnaires were sent to a total of 166 participants: that is 139 learners registered in the programme in 1997, 1998 and 1999 (whether they had completed the course or not); 17 DEASA member organisations that participated by enrolling staff on the course; and 10 tutors/markers who had provided support to learners over the three years of operation.

A total of 59 (36%) completed questionnaires were returned; representing the three participant groups as follows: 33% of learners; 59% of organisations and 40% of tutors. The breakdown of questionnaire returns is summarised in figure 1 below. Organisations are listed in alphabetical order and the full names appear as appendix 1.

This paper reports on the results of this survey. The next sections assess CDEP in terms of providing access to professional development and the quality, efficiency and effectiveness of its provision. The closed-ended questions of the questionnaires and CDEP records provided data for the access-related analysis, while the open-ended questions formed the basis for quality, efficiency and effectiveness aspects, including recommendations for future development of CDEP.

Organisations	Learners	Tutors	Total
ABEP*	1	–	1
BOCODOL/DNFE	4	1	5
CCE	1	–	2
CES	7	1	8
DEMS	1	–	1
EDC	3	–	3
IDE*	1	–	2
LDTC	6	1	7

Organisations	Learners	Tutors	Total
NAMCOL	5	–	5
NP*	1	–	1
SACTE	2	–	3
UNISA	14	1	15
TOTAL	46	4	53

* Organisations that did not return questionnaires

Figure 1 Questionnaire returns

Impact on practitioners' access to professional development

In the assessment of CDEP's impact on access to professional development and training, this evaluation considered three dimensions of access, namely participation, success and progression.

Participation

CDEP has provided access to professional development and training to a wider range of participants than was originally envisaged. The SACHED-DETU/UNISA-ICE description of the audience of CDEP initially focused on learners as the main participants. However, the DEASA experience of participation in CDEP shows that there are other important participants in the programme: learners, tutors, DEASA member organisations and COL, an important sponsor without which DEASA might not have been able to maintain this level of support for the programme.

For these four groups of participants CDEP provided access to professional development in a variety of ways.

Member organisations

For the 17 (out of a total of 22) DEASA member organisations who participated over the period 1997–2000, CDEP provided access to professional development that these organisations would not have been able to provide individually. In terms of DEASA's total organisational members this represents 85%. The participating members comprised higher education and secondary/further education institutions. There was thus no exclusion from participation in

CDEP in terms of level of institutional provision. Institutions such as SAIDE and SACHED chose not to participate because they believed their staff were well trained at this level of course offering.

The organisational and learner participation figures between 1997 and 2000 are summarised in figure 2 below.

Organisations	Learners				
	1997	1998	1999	2000	TOTAL
ABEEP	2	–	–	–	2
BOCODOL/ DNFE	–	4	–	–	4
CCE	2	1	–	–	3
CES	6	15	10	–	31
DEMS	–	5	–	–	5
EDC	–	2	2	5	9
IDE	–	1	–	–	1
IEMS	–	2	–	–	2
ILS	1	–	–	–	1
LDTC	7	9	–	11	27
MOH	–	1	–	–	1
NAMCOL	–	4	13	13	30
NP	1	1	–	–	2
OLSET	–	4	6	–	10
SACTE	–	–	2	6	8
TSA	2	–	2	–	4
UNISA	5	25	10	–	37
TOTAL	23	74	45	35	177

Figure 2 DEASA members participation figures 1997–2000

Tutors

CDEP tutors are senior staff with extensive experience and theoretical knowledge of open and distance learning who work in DEASA member organisations in Botswana, Lesotho, Namibia, South Africa and Swaziland. They provide two kinds of support for learners: face-to-face tutorials and assignment marking. While the face-to-face tutorial providers come from all of the above organisations, the assignment markers are South Africa-based, and are from SACHED-DEU and UNISA-ICE only, because of the centralised UNISA assignments and examination marking system. The small annual registration numbers in CDEP meant that only one tutor was appointed per country. This limited the institutional participation in tutoring. However, senior staff from DEASA institutions made an important contribution by participating as unofficial/volunteer mentors to the registered CDEP learners in their organisations.

Learners

Mid-level administrators and highly qualified part-time tutors have benefited from their participation in the course. Conditions for access to professional development courses seldom favour these two categories of staff. CDEP has thus broadened access for these often marginalised groups of distance education practitioners. The profile of staff who have benefited from CDEP training provides four broad categories:

- ***Student support services***, for example tutorial provision/supervision, student services, support for learners and tutors at a learning centre or within a specific geographical area
- ***Coordination***, for example management functions in specific centres/regions/nationally
- ***Predominantly administrative work***, for example administrative tasks related to aspects of effective distance education provision – often including administrative support for learners
- ***Materials development***, for example for adult distance learners/adult learners: preparation of print, radio materials, as writer, editor, producer, coordinator

An important characteristic of the learner profile over the first four years (including 2000) is that the entry level qualifications of CDEP learners ranged from the projected level of senior certificate or equivalent qualification or experience to postgraduate qualifications up to the doctorate level.

In addition to the breadth of audience described above, the geographical distribution of CDEP learners reflects the participation of distance education staff

from very remote centres of their institutions. These staff members would have been unable to further their professional development through a full-time course. By its nature as a distance education course, CDEP has not only provided access to these learners, but has also modelled the methodology it teaches.

DEASA and COL

As a regional association, through CDEP participation, DEASA has demonstrated its capacity to solicit financial support for professional development within its member organisations. The adoption of a 75% COL and 25% DEASA member organisations' sponsorship of CDEP shows institutional commitment to financial contribution for their staff members' professional development. Through CDEP, DEASA has also facilitated collaboration among its member organisations through the kinds of partnership that have evolved in the delivery of CDEP, for example in decentralised learner support and co-sponsorship of learners.

Success

Completion and success rates are essential to the notion of access. The relatively high completion and success rates of learners are closely related to the flexible conditions that are prevalent in CDEP. To sit the end of course examination CDEP requires students to have submitted five assignments and to have achieved an overall pass mark of 50% in assignments. The due dates for set assignments are negotiable to meet learners' and organisational situations.

Over the three years in question, the overall retention rate (that is, the number of students who sat the examination, whether they passed or failed) was 70%, a very high rate by distance standards.

Four factors contributed to this high retention:

- support from the course providers and DEASA member institutions
- the provision of three possible examination opportunities: October/November, January/February and May
- possible deferment of the examination date should personal circumstances warrant it
- an opportunity to resit an examination without having to repeat the whole course.

The examination results also show a relatively high success rate. In 1997, 69,2% of the enrolled students qualified to sit the end of course examination, 100% of

whom passed. In 1998, 70% of the enrolled students sat the examination, of whom 88,5% passed. In 1999, 70,1% of the enrolled students sat the examination and again 100% passed.

Retention and pass rates demonstrate that CDEP is providing access that leads to course completion and overcomes the 'revolving door' syndrome.

Progression

Three issues related to progression in the learning and working contexts that were mentioned by a substantial number of respondents concerned the level, articulation with other programmes and recognition and reward for successful completion of the course.

Because the course is the first of its kind in Southern Africa and has succeeded, to a large extent, there have been many calls to raise the standard of the course from certificate to diploma and/or higher: 'the certificate is great, but what next'. There have also been comments on the need for the course to articulate with more advanced courses and provide a clear career path for further study in the field of distance education. These are strong indications of the need for quality professional development for distance practitioners at all levels. Successful completion of the course and improved knowledge and skills on the job, however, are not yet recognised and rewarded by employers, as some respondents noted:

'Some of my colleagues are asking if the certificate can in any way place them at a slightly higher paying job, i.e. if employers are aware of this course and its benefits.'

'At this stage the certificate was actually just a self enrichment course – it means nothing on the salary scale.'

The providers of this course and DEASA member institutions will need to address these issues urgently.

Role of CDEP in improving the quality of ODL in Southern Africa

The assessment of the quality of CDEP used the dimensions of fitness of purpose, relevance, efficiency and effectiveness from the perspectives of the learners, tutors and organisations. The open-ended questions in the questionnaire provided the data in this section.

Fitness for purpose

In this aspect of quality the evaluation considered the responses of various CDEP stakeholders: learners as first-level users who joined the programme to improve their knowledge and skills (for personal and occupational reasons), improve their job performance and generally better their chances of employment and/or promotion; professionals (tutors, markers and examiners) as presenters of this course and custodians and evaluators of knowledge and quality provision; employers, that is, DEASA member organisations, as beneficiaries of the outcomes of the training and funders of staff participating in the programme.

Respondents were asked for their reasons for participating in CDEP and the ways in which they found that the course covered or did not cover these reasons.

These reasons fall into five general categories. An overwhelming majority (over 80%) wanted to gain a sound orientation to improved understanding of distance education or to improve capacity, skills and performance as distance educators. Organisations and tutors wished to evaluate the course in preparation for wider use; they wanted to see how the course worked. Some student respondents had joined the course on the recommendation of their organisation and this was in line with staff development policy. Lastly some students stated that the curriculum seemed relevant to their work and similar courses were rare in this field.

In describing how their reasons had been met/ not met, the general response was that their reasons for joining the course had been met in terms of broadening or deepening their understanding of the principles and good practice of distance education and consequently improving their motivation and performance. Some respondents stated that 'all' reasons were fully served and the course covered almost every area of the institution's activity.

The responses to the ways in which the course did not meet the participants' reasons confirm that on the whole the course had met their reasons, in that 59% of student respondents replied: 'None / Not Applicable / No comment', or gave examples of how the course had met their reasons. A number of participants responded that many/some elements were not covered in depth, in particular practical skills, and examples given in the texts were too heavily South African. These two issues were to recur in later sections.

A high degree of concurrence between the aims of the course (described in the CDEP background above) and the expectations of the participants is evident in the reasons for joining the course. Also, the responses indicated overwhelming satisfaction on the part of the participants that their reasons for joining the course had been met.

Relevance

Respondents were asked to comment on the relevance or irrelevance of the course to their jobs or organisational needs. Responses from organisations and students confirm that the aims of the course are being achieved to a high degree in terms of the needs of organisations' target audience; course content and provision of a broad orientation to good distance education approaches, practices and skills. It is interesting to note that one respondent said that the course had helped to 'address the deficiencies of service in the old style Southern African ODL and one can only hope that participants will actively address these deficiencies in their organisations or jobs'. In response to the question about ways in which the course had not been relevant, most respondents did not identify any areas of irrelevance or cited examples of relevance.

About 25% of respondents found that the course provided content that was outside their specific jobs or did not provide enough focus on their specific areas. There is an inevitable trade-off in a foundation course between the broad understanding that is essential and the specific skills that turn the vision into reality. However, as indicated in the comments from organisations and tutors, the addition of more practical content relating to specific skills such as tutoring and record keeping would improve the course, and this has been included in the recommendations (below) for the development of the programme.

Other issues were the predominance of South African examples in the course content; the need for a higher/diploma-level course and the inclusion of a unit on needs analysis in module 1. With regard to the value of including the needs analysis unit, in responding to the assignment questions on the module, many students described how learning about needs analysis (usually for the first time) made an important contribution to their understanding of the principle of learner-centredness.

Figures 3a and 3b below give a categorisation of relevance from organisations' and students' responses.

There is substantial concurrence between the aims of the course, in terms of 'best practice', and the experience of the learners in their jobs as distance practitioners and the observations of the institutional representatives. All this, we believe, provides evidence of a considerable degree of relevance.

Organisations	Students
<p>CDEP provided: a broad vision of good ODL practice/relevant knowledge/many current issues in DE to apply in practical situation/ how distance systems work/ covered every aspect of necessity for our institution, so it can improve in all areas of provision 35%</p> <p>focused on our target audience – adult learners: 'characteristics of a South African distance learner' / 'difference between adult learners and younger school learners' 20%</p> <p>covered organisational aspects: addressed quality of materials, their use and delivery; learner support services, educational counselling 20%</p> <p>providing skills in distance education: putting into practice what has been gained from the course; tutors enrolled 'are now able to write good workbooks'; [we] 'witness a change in attitude towards helping distance learners'; 15%</p> <p>has helped to address the deficiencies of service in the old-style Southern African ODL - for example as regards openness, student support, flexibility, quality materials, etc. 'could be recommended for everyone in DE provision' 10%</p>	<p>Relevant to learner support [i.e. tutoring, tutor training, ongoing contact, counselling, study groups, assignment marking, learner centredness] 26%</p> <p>Consolidation of knowledge/own experience of distance learning/ development of commitment 20%</p> <p>Systems of distance education administration, management 19%</p> <p>Preparation and good use of distance learning materials 16%</p> <p>Improvement in skills/competence 12%</p> <p>Everything is relevant/All! 7%</p> <p>Nothing about script writing or editing [for audio] 1%</p>

Figure 3a Responses to question: *In what way has CDEP been relevant to your organisation/your job needs?*

Organisations	Students
<p>Examples were too South Africa oriented 11%</p> <p>Content and assignments need to be relevant to the [professional] work of the students; ‘aspects such as conducting a needs analysis felt out of place and could be replaced by something more specific’/ ‘some sections e.g materials development were not particularly relevant to those of our staff who are tutors or administrators - but, as mentioned elsewhere, this was also one of its strengths’ 22%</p> <p>Graduates want a diploma, which UNISA does not seem to have anticipated’ 11%</p> <p>No ways 33%</p>	<p>Nothing/N/A/only positive comments/no comment/blank 65%</p> <p>Course focused on area/s not relevant to respondent’s distance education area of work 11%</p> <p>Not enough detail on respondent’s area of work/on course as a whole 9%</p> <p>Some sections not now applicable, but still useful 7%</p> <p>Part-time tutors who responded only in terms of their full-time work 7%</p> <p>Level of course too low 2%</p>

Figure 3b Responses to question: *In what way has it (CDEP) not been relevant?*

Effectiveness and efficiency

Responses from organisations, tutors and students to the question on major strengths and weaknesses of CDEP included issues of effectiveness and efficiency.

All three groups commented enthusiastically on the effectiveness of the CDEP syllabus, design, structure and presentation: the user-friendly language, open access, wide coverage of good ODL practices and accessible methodology. The combination of print materials, audio programmes and face-to-face sessions was experienced as good and effective delivery strategy. Respondents commented on the comprehensive assignment marking, which provided encouragement and guidance. The course was seen to have immediate application, and to be practical, job related and empowering:

‘I have acquired a lot of knowledge related to my work as a writer of materials for adult learners.’

'I gained some skill for administrative work and I became more observant of adult learners and I became directly involved with them, solving some of their problems.'

'It is job related in that it helps you improve how you have been performing.'

'It is practical and down to the point'.⁷

Some commented on the benefit of the concurrent experience that the course provided as distance education student and as distance education practitioner:

'As a distance learner, I also experienced what problems distance learners experience in their learning process. As a result I have learnt to relate to them and understand them'.⁸

Respondents mentioned areas that need attention in order to improve the effectiveness of the course. The main aspects were the need for improved learner support, including face-to-face tutorial sessions to be provided more widely and more regularly, and greater support for students from tutors. Some respondents found that the teaching of practical skills, such as record keeping, materials development and procedures for administration, was inadequate: 'Record keeping needs more treatment for practitioners whose job is record keeping.' Some students commented on the absence of tutorials in certain centres in their country. One of the tutor respondents found that the course was too short to deal with the postal and other delays experienced by students in remote areas and said it should be lengthened from one year to 18 months. For student respondents who had higher educational qualifications the course was seen as 'not too demanding', and 'too basic', and could be completed within a shorter time than one year, even without face-to-face tutorial support. For these respondents the course lacked advanced exercises and further reading or references, while others found it more demanding than anticipated.

Only a few respondents commented on efficiency. This was probably taken for granted. However, the absence of efficiency is noted below. A few organisations commented that the administration (as one of the categories suggested in the question) was 'fair/good – except for a few hiccups here and there – perhaps to be expected in a new course'. One tutor found that the support for learners and tutors was good.

Respondents from all three groups commented on the 'unacceptably long' assignment turn-around time, which was because 'communication with

students outside South Africa is problematic; postal delays lead to delayed feedback'. In a very few cases assignments were lost in the post on their way back to students. Follow-up and delivery were seen to be not as consistent or as frequent as was required. Tutors found that communication with themselves and the students needed improvement, as well as the administration of the course.

We can conclude that with regard to effectiveness, general satisfaction was expressed, but there are gaps that need to be addressed. Efficiency in terms of administrative tasks and timely communication with learners and tutors is an extremely important criterion for effective distance education delivery and is difficult to achieve in a region that is not technologically well resourced. However, the providers of CDEP need to develop strategies to improve aspects of efficiency that are within their means and control.

Role of information and communication technology (ICT)

CDEP uses print, audio cassettes and face-to-face sessions as the main delivery media. The learning materials are in print and audio cassette format, while face-to-face sessions are used mainly for limited tutorial support in centres at DEASA member organisations' facilities in the five participating countries. CDEP participants who live near the UNISA headquarters can also pay face-to-face visits to the administrative staff for enquiries and to discuss problems regarding their studies. The combination of these three media was said to be a good delivery strategy. The audio cassettes were reported to be 'well designed and recorded'; 'give more information'; and 'make it a very personal experience'. – However, some of the cassettes were of 'poor quality' and some were 'inaudible'.

Besides print/correspondence as the main means of communication with learners and tutors, telephone and electronic mail (e-mail) were used to a limited extent. CDEP participants used these media mainly for queries and to communicate urgent messages on matters such as registration, examinations, and dates and venues of face-to-face sessions. The wider use of these media was restricted by costs in the case of the telephone and access in the case of electronic mail. The learners who worked in the remote centres of the various DEASA member institutions were mostly affected. The use of e-mail facilities for assignment submission and return has not yet been implemented by UNISA, mainly because of the centralised assignment system and limited

number of learners enrolled in the course, which therefore does not qualify for priority in the introduction of this facility.

It is important that wider use of information and communication technology should be investigated. The envisaged revision and internationalisation of the course should consider ways of increasing the use of ICT in teaching, learning and administration. Whatever ICT decisions are taken to expand the use of ICT, it is important that learners who are already disadvantaged because of remoteness, lack of resources, etc., should not be further disadvantaged or marginalised by lack of access.

Recommendations for the development of the programme

It is evident that CDEP is highly regarded as a quality and effective programme for professional development of distance education practitioners in the DEASA member institutions. It is among the first innovations in the SADC region that is practically implementing the ideals of the SADC Protocol on Education and Training that is referred to in the Introduction. For example, the CDEP initiative is a multi-faceted collaboration in the delivery of a distance education professional development course. The implementation of the course is supported and monitored by a regional professional association that has marshalled financial assistance through international (COL) and member institutions' sponsorships. It has encouraged a sharing of 'ideas, views and experiences to enhance the quality and relevance' of this distance education programme according to the precepts of the Protocol on Education and Training. And, if the proposed plans for improving the programme are implemented, will widen the boundaries of this cooperation by beginning a more fully inclusive 'design, production and dissemination of distance education learning materials' process when CDEP is reviewed, upgraded and internationalised. The weaknesses and suggested improvements noted by participants in this evaluation are meant to enhance the quality of the programme. The recommendations below flow from these weaknesses and suggestions and it is encouraging to note that the providers and participating institutions are already addressing some of them.

Increased participation

In view of the overwhelming positive response to CDEP, it is surprising that learner participation is so limited, 177 learners over the four-year period 1997–2000 (see figure 2 above). This is partly because potential users are often reluctant to participate in untested innovations whose quality is unknown (as

attested by comments that the reason for participation is 'as a way of evaluating the course', presumably in preparation for wider use later) and partly because of the limited financing of professional development for the levels of staff who form the target audience of CDEP, namely non-academic, mainly administrative and part-time staff such as tutors. That CDEP has provided access to training for these levels of staff during this period is a major achievement, despite the limited numbers. Now that the course has been evaluated and its usefulness endorsed, the weaknesses need to be addressed and the course widely advertised and promoted within the region. DEASA and the providers' recent promotion of CDEP in the SADC Technical Committee for Distance Education is a step in the right direction. But promotion and publicity efforts need to be greatly expanded because, as some respondents have noted, 'many people who need it are unaware of it or that it is good enough' and the 'course should be made available to anyone who wants to study it, not only for distance education practitioner in order to educate the nations of Southern Africa with the necessary skills'.

Recognition, currency and reward

The need to find mechanisms for increasing the recognition, currency and reward for successful completion of CDEP has been strongly made and should be addressed by all participants of this programme: providers, tutors, organisations and learners themselves.

It is heartening to note that CDEP providers are pursuing three ways of addressing these issues. One of these is registering the course according to the new requirements of the South African Qualifications Authority (SAQA) and thus ensuring that it becomes one of the recognised programmes offered by higher education institutions. CDEP is already included in the SAQA list of courses offered by UNISA and will become part of the relevant skills, education and training authority processes. The second is investigating ways of ensuring CDEP articulation with other UNISA courses and other courses in the region to create a career path for ODL practitioners. The third relates to ensuring that the course is registered as a skills/professional development course in the UNISA system and negotiating a suitable reward for those who have successfully completed the course. As one of the providers of the course, UNISA should be seen to be taking the lead in the issue of suitable reward/s for CDEP completers.

The role of DEASA members regarding these issues has been indicated in the interim CDEP evaluation reports presented at regional meetings of the

association. The report suggests that in each of the DEASA member countries there should be similar channels to those described in the South African situation above and that DEASA members should communicate information about qualification registration for academic and vocational purposes and the steps to be followed by the providers; and that each organisation should investigate the kind/s of reward that can be awarded to staff who have successfully completed CDEP.

But the providers need to impress on current and former learners the important role that they could play in lobbying in-country and within institutions on these issues. CDEP providers need to develop strategies for effecting active participation by learners in this kind of lobbying.

Addressing identified administration related weaknesses

A number of weaknesses have been identified in the administration of the programme and include issues such as assignment turn-around time and communication. The problems of lengthy assignment turn-around time are aggravated by the number of assignments, together with the deadline set by UNISA administration for admission to exams. Because most learners register late, mainly owing to delays in agreements on sponsorship, this means that learners are required to complete all five assignments within 6–7 months. This leaves very little turn-around time for learners to submit and receive an assignment back in time to benefit from the comments before completing the next assignment. This is particularly true of learners for whom postal services take a long time, and who have no access to electronic means. The providers are committed to addressing these issues within the constraints of delivery procedures outside the control of the ICE. Some of the problems, such as postal delays, are beyond the control and scope of the providers, but will be borne in mind in the scheduling process. The providers have committed themselves to ensuring that the assignments are more focused on the learner's own institutional practice, as suggested by a number of respondents.

Upgrading and ensuring regional/international inclusivity

The need for internationalising or ensuring regional inclusivity of the course, that is, moving away from a South African focus, has been strongly voiced. The providers and DEASA have discussed ways of soliciting funds for the review, upgrading and internationalisation of the course. It is envisaged that a CDEP materials review and redevelopment workshop would be convened. The workshop would cover a range of issues such as level, practical skills

requirements, and ICT, including improvements to the audio programmes and suitable content for such an international course. The subsequent revision of the material would, *inter alia*, need to cover addition of detailed sections on practical skills such as record keeping and tutoring (recommended by a significant number of respondents as an important improvement to the course). The revision will need to reflect the experience and culture of the wider region of Southern Africa, as highlighted by a number of respondents. The providers themselves are aware of the need to periodically revise the course in terms of ever-expanding knowledge in the field of distance education and in the light of the changing educational and socio-economic contexts of the institutions and countries served by CDEP.

The development of similar courses at higher levels, for example master's level, is at an advanced stage of negotiation within the region and the upgrading of CDEP would need to ensure articulation with such initiatives and existing bachelor degrees to create a clear career path for distance education practitioners.

Further evaluation

In view of the very positive comments about the value and quality of CDEP in providing and/or improving the knowledge, skills, competence, etc., of distance education practitioners, it is important to investigate how practitioners apply these in their day-to-day job operations and to get to know the challenges that are faced and how these are being addressed in the contexts in which practitioners work. It is, therefore, recommended that mechanisms be put in place for implementation of the original evaluation proposal, which indicated that this first stage of the evaluation would be followed by fieldwork in selected DEASA member organisations. The fieldwork will help to verify the findings and issues raised in stage 1, seek understanding of the practitioners' learning/working milieu and how these issues affect their day-to-day practice, and solicit suggestions for addressing the issues and assisting in consolidating the recommendation for improving the quality of the course. The focus of the second-stage evaluation will thus be on assessing whether and how the 1997–2000 CDEP practitioners 'put into practice newly developing knowledge, skills and attitudes', one of the stated aims in CDEP brochure.

Conclusion

For distance education practitioners over a wide range of levels, the course has been found to provide quality orientation to the theory and practice of distance education. It has demonstrated its ability to provide relevant knowledge and

skills and has inculcated professional attitudes in learners, thus promoting the educational philosophy of learner-centredness on which the course is founded. The course has succeeded, to a large extent, in modelling good distance practice, especially with regard to quality materials, tutor-marked assignments as teaching tools, flexibility and learner support. Thus it has become an example for participants of what is possible, even within the limited resources of the Southern African/SADC region.

All over the world, remote or isolated distance learners struggle because of poor access to their institution, learner support services and technology. Isolated or remote CDEP learners have experienced problems with delivery of the course services and have suffered from a lack of support. The providers are committed to addressing these issues as a matter of urgency, in collaboration with participating institutions and DEASA; a demonstration of the importance of evaluation in the improvement and assurance of quality in educational programme development and implementation.

Practical in-service training of distance education practitioners similar to that provided by CDEP is very important in increasing the effectiveness and therefore the likelihood of success for distance learners throughout the spectrum of this growing form of education provision. The impact of such training on increasing overall access to quality distance education provision in the region cannot be over-emphasised.

Notes

- 1 COL 1990.
- 2 SADC 1997.
- 3 Article 9(A)5.
- 4 Article 9(A)6.
- 5 CDEP brochure 1998/99.
- 6 Ibid.
- 7 CDEP student respondents.
- 8 CDEP student respondent.

References

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Appendix 1 List of CDEP participating organisations

Category	Country	Organisations
Providers	South Africa	University of South Africa – Institute for Continuing Education (UNISA-ICE) South African Committee for Higher Education – Distance Education Training Unit (SACHED-DETU)
Users	Botswana	Botswana College of Distance and Open Learning (BOCODOL)
		University of Botswana-Centre for Continuing Education (CCE)
		Ministry of Health-Nursing Education Programme (MOH)
	Lesotho	Lesotho Distance Teaching Centre (LDTC)
		Institute of Labour Studies (ILS)
		University of Lesotho Institute for Extra-Mural Services (IEMS)
	Namibia	University of Namibia-Centre for External Studies (CES)
		Namibia College of Open Learning (NAMCOL)
		Namibia Polytechnic (NP)
	South Africa	Open Learning Systems Education Trust (OLSET)
		University of South Africa (UNISA)
		Technikon Southern Africa (TSA)
University of Fort Hare Adult Basic Education Project (ABEP)		
South African College of Teacher Education (SACTE)		
Swaziland	University of Swaziland - Institute for Distance Education (IDE)	
	Emlalati Development Centre (EDC)	
	University of Swaziland - Department of Extra-Mural Services (DEMS)	

Category	Country	Organisations
Sponsors	Canada	Commonwealth of Learning (COL)
	Southern Africa	Distance Education Association of Southern Africa (DEASA)

Developing adult education delivery methods that extend educational opportunities to rural people of north-central Namibia

Haaveshe Nekongo-Nielsen

Introduction

Today's societies are developing rapidly and in order to keep up with these developments people need to learn how to survive in these fast-developing societies. We are aware that education plays a variety of roles in the economy and development of any country and its people. Adult education in particular has always been thought of as the educational activity that can bring about social change and wider participation for disadvantaged people in development issues that affect their lives. Through it, people are able to reflect, share their experiences and adjust to changing social and economic conditions and thereby acquire survival methods for the rapid changes taking place in their societies. However, traditional methods of adult education have not yet made a significant impact on the development of the rural population of Namibia, for the sole reason that the delivery of educational programmes has mainly been a face-to-face affair.

Since independence, farmers and non-governmental organisations (NGOs) in Namibia have been struggling to learn improved methods of cattle production, but these have not been successful. Often farmers go on training programmes about the scientific methods, skills and knowledge that are required for increased production, but these are barely implemented after training because only a few farmers are able to attend such programmes. When these farmers return to their villages, they fail to make an impact, because they are dealing with many farmers who have not gone through the same experience. These programmes therefore fail to bring about the multiplier effect that is required to bring about change in rural areas. For educational programmes to be delivered successfully to as many people as possible and to have a multiplier effect, innovative educational methods need to be employed. These delivery methods should enable large numbers of people to participate in their own learning and development and provide opportunities for farmers to use their existing knowledge and learn new ideas.

The University of Namibia Centre for External Studies and the Northern Campus have therefore embarked on an action research project to test and refine educational approaches that facilitate and promote adult learning, and can be used much more widely to facilitate social and economic development on a much larger scale than has been achieved to date by traditional adult education methods. In embarking on this research project two concepts are important:

- Alternative methods of adult education can be developed and used to effect change of attitudes, behaviours and practices among cattle farmers of the region and therefore bring about social and economic development.
- For such methods to be effective, they must incorporate mass media approaches to allow communication of information to people to be carried out on a large enough scale to make a significant impact.

This project has been funded by the Commonwealth of Learning, the Ford Foundation and the University of Namibia Centre for External Studies. Appreciation goes to the members of the Research Steering Committee and the Namibia Broadcasting Corporation who gave their time and resources.

We decided to develop an educational programme to be used as a tool in researching the effectiveness of a combination of educational approaches to facilitate learning among cattle farmers. A radio course to teach cattle farmers successful ways of cattle husbandry and production is being developed by two units of the University of Namibia, namely the Centre for External Studies and the Northern Campus. This article describes the genesis and development of the programme that will be used in testing these adult educational approaches. It describes how adult education approaches can be enhanced in order to make a significant impact on the target population by coupling them with mass media communication methods. The course is developed on the assumption that it is possible to use a combination of educational media to bring about significant changes in knowledge, skills, attitudes and practices of small-scale farmers in the north-central regions of Namibia. Such a combination of media has not been seriously used in Namibia before. To be effective it will depend on the successful realisation of the following elements during the development and implementation stages of the educational programme:

- carefully relating content and approach to expressed needs
- recognition of current knowledge and media access among the target audience and the country
- full integration of media and materials
- effective local organisation and supervision of the study groups

- careful evaluation and monitoring for further refinement and revision of the educational approaches.

It is hoped that such learning will bring about improvement in the farming knowledge, skills, attitudes and practices of cattle farmers in the four northern regions. It is also hoped that the study will contribute to the socio-economic development of the subsistence communal farmers of the region and provide an opportunity of making innovations available to the general public. In using the selected approaches it is assumed that there is a relationship between the educational approaches used in carrying out an educational activity to an adult audience and attaining social and economic development. The study proposes that communicating information to rural people through mass media and using people's existing knowledge and experience brings about rapid and large-scale behavioural change that results in people and communities attaining development. For communication of information to be effective and meaningful to rural people it must be conducted in their own environment and use available media.

The testing of these approaches involves a consultation or discussion approach to learning. It has been proved that people learn by interacting with other people, places and things, and without this interaction we are no more than on the day we were born. It is hoped that if people are given an opportunity and allowed to discuss their problems, they will be able to find solutions and influence one another. This discussion approach to learning, we hope, will enable farmers to increase their knowledge and skills that are required for improving their efficiency and productivity.

The research project in which the radio course will be used will attempt to answer these two questions:

- Can the chosen educational approaches be used to facilitate adult learning so as to increase knowledge and skills and affect attitude and practices of cattle farmers in the communal areas of the four north-central regions of Namibia and thus improve their products?
- What are the conditions for successful implementation of such approaches and what are the main problems and constraints that can limit or prevent success?

The research methods that will be used to generate data will be:

- A knowledge, attitudes and practices (KAP) study to provide the baseline information for course materials

- Carefully planned and detailed observation of the educational campaign in action – implementation of the radio course
- Field notes obtained through discussion and open-ended interviews with farmers and group leaders participating in the learning campaign
- Measurement of immediate changes in the practices of participating farmer
- Audio taping the study sessions of a few randomly selected study groups
- An evaluation to be conducted among the target audience four months after the educational campaign.

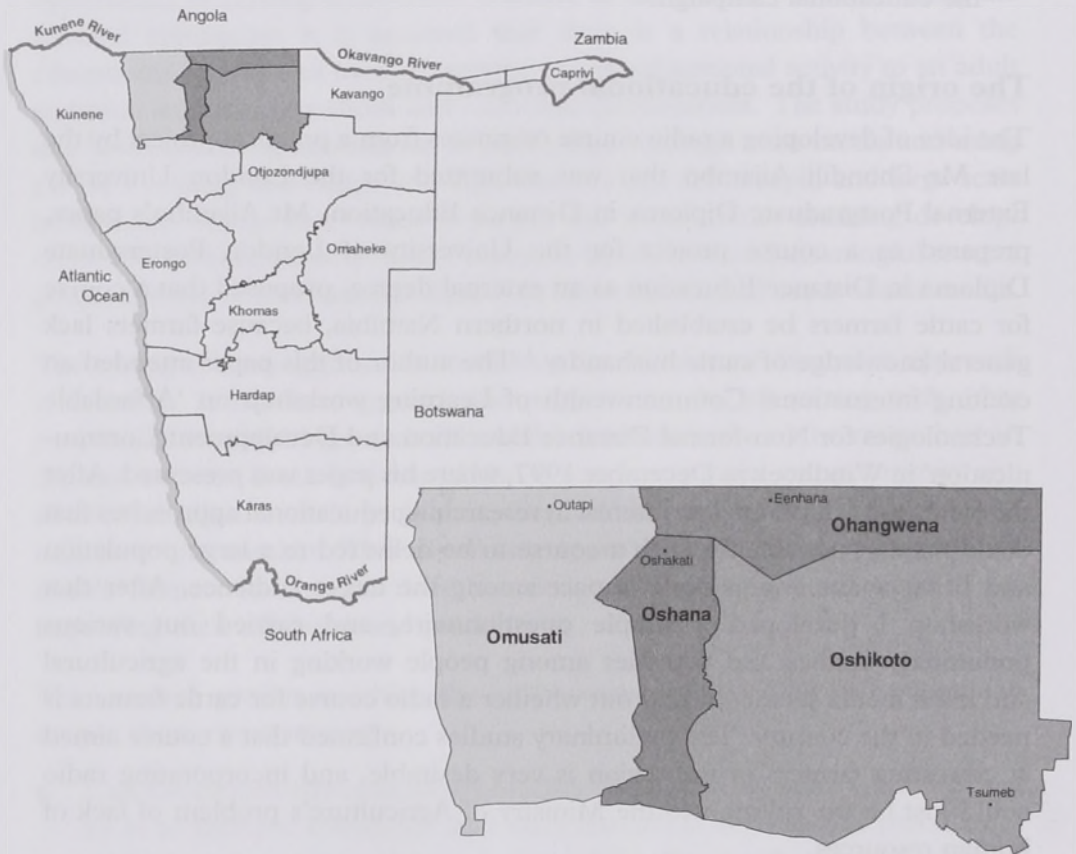
The origin of the educational programme

The idea of developing a radio course originates from a practical project by the late Mr Shondili Aijambo that was submitted for the London University External Postgraduate Diploma in Distance Education. Mr Aijambo's paper, prepared as a course project for the University of London Postgraduate Diploma in Distance Education as an external degree, proposed that a course for cattle farmers be established in northern Namibia, because farmers lack general knowledge of cattle husbandry.¹ The author of this paper attended an exciting international Commonwealth of Learning workshop on 'Affordable Technologies for Non-formal Distance Education and Development Communication' in Windhoek in December 1997, where his paper was presented. After the workshop I developed an interest in researching educational approaches that could make it possible for such a course to be delivered to a large population and bring about a large-scale impact among the target audience. After that workshop I developed a simple questionnaire, and carried out various preliminary studies and activities among people working in the agricultural and mass media sectors to find out whether a radio course for cattle farmers is needed in the country. The preliminary studies confirmed that a course aimed at educating farmers in the region is very desirable, and incorporating radio could just be the solution to the Ministry of Agriculture's problem of lack of human resources.

Cattle farmers in north-central Namibia

Namibia is a huge country with a very scattered population. It is one of the semi-arid countries in Southern Africa, covering 824 000 square kilometres, with an average rainfall of 350 mm. Most Namibians (about 70% of the total population) live in rural areas and are engaged in subsistence farming. Over half of rural dwellers are found in the four political regions of Ohangwena, Omusati, Oshana and Oshikoto, the area previously known as Ovamboland and referred

to here as the north-central region. This research project is located in these regions. The north-central region covers an area of 55 000 square kilometres, has a population of over 800 000 people and a cattle population of 543 550 (1998 estimation by the Regional Directorate of Veterinary Services). Compared with most parts of the country the north-central region has a slightly higher rainfall (350 mm); only the Caprivi region has a higher rainfall of over 500 mm.



The farming communities in the north-central regions are usually referred to as communal farming communities, because farming is done at subsistence level – only for survival – compared with commercial farmers who farm to export and sell for profit. Communal farmers are separated from the commercial farmers by a physical red line (cordon fence) so that cattle from the communal areas have no possibility of mixing with cattle from the commercial areas. This is because, unlike commercial farmers’ cattle, communal farmers’ cattle are not regularly vaccinated.

Agriculture is a vital aspect of the economy of Namibia. About 70% of the economically active Namibian population depend on agriculture for their livelihood. Yet agriculture contributes only about 20% to the gross national product (GNP) of the country. About 85% of that contribution comes from red meat, of which 98% is produced by the commercial farming sector and only 2% by the communal farming sector.

Communal farmers farm mainly at subsistence level – farming only for their own consumption. The Annual Agricultural Survey of 1999 found that in Namibia ‘subsistence farming’ is the most common main source of income for female-headed households, while ‘wages in cash’ is the most common main source of income for male-headed households.² It should then be noted that production for survival is also important for the welfare of people in these regions, as they are able to produce their own food and do not become a burden on society. The proposed educational programme targets subsistence farmers, and will indirectly empower women farmers, who are the backbone of development of rural areas in this country.

The red line separation somehow disadvantages communal farmers in the north-central regions as they do not obtain regular information about farming practices and therefore rely only on the old methods they acquired from their forefathers. That means that because cattle farmers in remote rural areas have limited previous educational backgrounds, they are unable to follow agricultural developments as presented in the media and government plans and reports. However, since independence in 1990, the government has put great efforts into adult education and the education budget has been one of the highest since then. For a third world country Namibia has a good literacy level with only 20% illiterate in the four northern regions and 23% for the country, according to the 1997 estimates. One can therefore say that educational activities can be carried out with a good chance of success. In addition, the 1999 KAP survey conducted among the target audience found that many farmers possess local knowledge, skills and practices that can be useful when developing and implementing modern farming technologies as well as a comparatively high level of basic literacy.

The National Agriculture Policy of 1994 stated that in order to achieve higher output in the agriculture sector, the government would support educational programmes in the communal areas. These will include programmes of livestock husbandry, disease prevention and control, genetic improvements, herd range management, expansion of marketing and processing facilities as well as dissemination of information on market prices. For communal farmers

to benefit from government-supported programmes, well-organised educational campaigns have to be developed and implemented. Such campaigns should enable farmers to learn about and utilise available resources and to contribute more to their own incomes and the economy of the country.

Through this programme people will be empowered to do things for themselves. Researchers at the SADC Centre of Communication for Development in Zimbabwe noted that human development could only be achieved when people are empowered to become critically conscious of their economic, social and physical circumstances by allowing them to discuss their own problems and make decisions.³ The most significant experiences in adulthood involve critical reflection, which is necessary in the way we pose problems and reassess our own orientation to perceiving, knowing, believing, feeling and acting. That means that once people are given an opportunity to look at their situations and reflect on their experiences, they become aware of issues they were not aware about before and that changes the way they perceive the world. It is therefore hoped that this programme will contribute to human development by enlarging people's capabilities, choices and opportunities through group discussions and reflections, thereby improving their quality of life.

Why incorporate mass media?

Every education process must be communicated to the audience through appropriate delivery methods. The vehicle that carries information to the target audience is very important and needs to be considered very carefully, otherwise the message will not get through. Rogers and Shoemaker⁴ defined communication of new information to the general public as diffusion. Scientifically, diffusion is defined as the penetration of oxygen through blood vessels to all parts of the body, as fast as possible, so that the animal or person does not die from lack of oxygen. That implies that if development has to take place as a result of the introduction of new technologies and ideas, then those ideas ought to reach all parts of society so that no member of society will die for lack of information or being deprived of the technology. That means that in our training of farmers we should employ communication methods that will spread innovations and new ideas to a large number of people in our society on an equal basis and enable many people to receive the same information at the same time.

Rogers and Shoemaker⁵ noted that effective communication between source and receiver leads to greater homophily (communication with a similar person) in knowledge, beliefs and overt (candid or open) behaviour. Many advocates of

mass communication have noted that radio as a mass medium enables a source of one or a few individuals to reach an audience of many individuals, using limited resources. Dodds and Mayo⁶ found that governments throughout the world, including the developing world, have opted for distance education solutions to various problems at different times because of the flexibility that they give. Farmers need flexible programmes that can fit into their busy schedules. They do not have the time to travel each day to a central place to attend educational programmes. They require programmes that can offer them the option of meeting near their residences, and in an environment with which they are familiar. That means that educational delivery methods must be applicable to the target audience as well as the environment in which they are applied.

In Namibia radio is very well utilised by local communities, for example as a telephone to notify family members of bad news such as a death. Statistics from the 1997 survey indicated that Namibia has a radio listening population of 90% and most households (68% of the population) have radios. The 1999 KAP study found that 90% of the people interviewed own radios and 87% are prepared to make their radios available to study groups in their villages during the implementation of the educational programme. In addition, the Namibian Broadcasting Corporation (NBC) gives free time slots to educational programmes, making it favourable for educational institutions to develop programmes for radio. Through this valuable resource of radio, the University of Namibia Northern Campus and the Centre for External Studies therefore, saw an opportunity to be engaged in an activity that extends educational opportunities to a large portion of the rural population and promotes the principles of life-long learning.

The assumption is made that radio can provide important information to people on a large enough scale to make an impact and bring about significant change. Evidence from projects in many parts of the world indicates that the mass media can be effectively applied to meet basic developmental needs. The conclusions of a meeting of experts on the use of mass media in adult education organised by UNESCO in November 1967 stated that 'There is convincing evidence from projects in many parts of the world that the mass media can be effectively applied to the development of resources to meet basic economic, social, educational and cultural needs'.⁷

Since then, many countries, especially in Africa, have made strides in the use of mass media in education for imparting knowledge and skills to adults and

influence attitudes and practices, especially to those who live in rural areas. People have realised that the use of radio in non-formal education can be a strong medium of instruction for reaching people in remote areas where traditional adult education methods failed. In 1972 Dodds made a survey of the multi-media approaches to non-formal education and found that many of the institutions and organisations surveyed were using the radio successfully.⁸ On the other hand, Colin Fraser and Sonia Restrapo-Estrada⁹ made an analysis of several cases of communicating for development and concluded that there are many countries that need to utilise mass media for development. They added that some issues such as how to make communication an effective weapon for development need to be discussed.

A number of African countries have utilised radio in their adult education programmes.¹⁰ In Ghana since 1964 radio has been used in non-formal adult education programmes, and as early as 1992 radio was used to support classroom teaching and learning in the Literacy and Functional Skills Project (LSFP), which promotes literacy among adults. The Ghanaian LFSP makes people aware of the need for social and economic improvement. In Zambia, radio farm forums have been running since the early 1960s to educate farmers in ways of farming productively. The Mauritius College of the Air came into being in the 1970s and has been innovative in making educational facilities accessible to more people by utilising the radio medium. But even in these countries there is recognition that the way in which radio is incorporated in educational programmes for the non-formal sector still needs to be improved.

In Namibia, even though radio is used for many things such as informing people about public meetings and entertainment, it is not well utilised for education. Immediately after independence the Ministry of Education, supported by the British Overseas Development Administration, utilised radio in the course 'Let us speak English' to educate teachers to speak the English language proficiently. Nonetheless, the programme was withdrawn because of lack of proper organisation and supervision. This study assumes that if a radio programme has to be meaningful to the target audience and facilitate learning, it is necessary to complement it with well-trained group leaders from among the study groups. The group leaders will ensure proper organisation and supervision of study groups and, in the absence of experts, will lead the discussion and emphasise important points that radio is trying to convey to the audience. Using trained local group leaders solves the problems of lack of human resources and builds the capacity of the people who are available in rural areas and can be consulted by others at all times. This ensures sustainability of the programme because

trained group leaders live in the village and will continue to organise educational meetings.

The developers of the programme are taking cognisance of experience gained elsewhere from similar programmes and are learning from that growing, if spasmodic, experience, such as the Tanzanian experiences from the sixties and seventies that are reported by Hall and Dodds,¹¹ those of Warr¹² in Pakistan and Dodds in Zambia.¹³ These document the development of a multi-media methodology for adult learning that combines radio series, supports printed materials (sometimes in the form of flipcharts) and organised study or listening groups that meet and study together over a fixed period.

With this educational programme the university will assist in creating an opportunity for rural people to influence one another's attitudes, behaviour and practices, and allow them to participate fully in their own development. Trained group leaders by themselves will not have the desired impact. Therefore highly visual illustrations, with some text for those who can read, will be developed to aid the discussions. The flipchart illustrations will highlight the most important learning points that the radio is communicating to the audience. The programme will allow participating farmers to try out what they have learnt. This demonstrates the old educational theory of 'I hear and I forget, I see and I remember, I do and I learn'.

As stated above, the aim of this programme is to educate cattle farmers in successful ways of cattle husbandry and animal health. The learning objective is to 'increase knowledge and skills, develop and change attitudes and effect change in practice'. The author believes that given the opportunity and provided with the skills, people can take care of their own development. As the saying goes: 'Teach a man to fish, and he will always have food'. This follows Paulo Freire's¹⁴ philosophy of providing people with opportunities, allowing them to think for themselves and enabling them to participate in the social, economic and political decisions that affect their lives. In addition people will learn better if they are left in their local environment because it is less threatening and participants will be free to express themselves in a familiar setting – with neighbours and friends from the same village. Thus, their participation is not hindered by the presence of the experts.

In educating farmers, relevant educational approaches need to be employed, as farmers cannot be trained in a classroom setting or with basic methods that are used at the early stage of human development. Adult education requires

approaches that will persuade people with pre-formed attitudes and beliefs to develop new ways of thinking and doing things. These require good communication methods to convey educational materials to as many people as possible at one time. Therefore this programme will use radio coupled with highly visual printed materials and group discussion supported by well-trained group leaders. To develop an educational programme that utilises a combination of approaches and is appropriate for diverse adult learning situations, a lot of planning and some preliminary work had been carried out by the author. In this section I will give some background of the activities and studies that were conducted, which assisted in shaping the development of the radio course.

How is the educational programme being developed?

From July to September 1998 I carried out a detailed local and national consultation with stakeholders in the agricultural sector to solicit initial interest among stakeholders. This consultation confirmed the desirability of the radio course and the direction in which the course materials development should proceed. During this consultation a need was expressed to have a broad advisory group, made up of all stakeholders in agricultural and mass media sectors in the north-central regions of Namibia. It was decided that this group should meet quarterly to discuss the approach that should be taken in developing the course materials and other issues surrounding the process. The programme is therefore developed in collaboration with the following stakeholders in the form of a steering committee:

- The Ministry of Agriculture, Water and Rural Development's Extension Division and the Directorate Of Veterinary Services as well as the Ogongo Agricultural College
- The Omafa Farmers' Cooperative
- Namibia National Farmers Union
- Meat Corporation of Namibia
- The Namibia Broadcasting Corporation (NBC)
- The University of Namibia (Faculty of Agriculture, Department of Information Science and Communication Studies, the Centre for External Studies and the Northern Campus)
- Individual specialists and farmers in the region.

The steering committee met for the first time in October 1998 and started the discussion on the planning and development of the curriculum and course

materials. Having the steering committee ensured that the stakeholders' issues were taken into consideration during the course development process. The group assisted in shaping initial ideas about the course materials, the nature of the radio programme and visual printed materials. The group suggested that in order to develop the materials that address the real needs of farmers, a KAP survey among cattle farmers of the region had to be carried out to give the broad ideas for the course curriculum.

So, from September to November 1999 the author carried out an extensive KAP survey that covered 64 villages and interviewed 450 farmers on all issues of cattle farming. A 16-page questionnaire was developed by the researcher and reviewed by the steering group. The KAP survey enabled a detailed study into the current livestock-marketing situation and allowed information and educational needs of the target audience to be identified. It looked into farmers' existing knowledge, attitudes and practices.

The study revealed that the basic needs that must be satisfied if farmers in the north-central communal areas are to farm productively are varied, from subject content to behavioural changes. Therefore course materials should include the following topics:

- The economics of cattle farming – cattle farming as a bread and butter issue
- Grazing management and cattle feeding as well as general cattle management
- Cattle diseases and animal health (including symptom identification and treatment)

The study also revealed that all materials on all topics should be delivered in ways that encourage attitude and behavioural changing.

Additional issues discovered during the KAP survey that need to be considered in materials development and course delivery include:

- Literacy has improved, the literacy rate among the target audience was found to be 78%.
- Most farmers are herding cattle for their relatives and not themselves. So who has the power of decision making when it comes to cattle farming in these regions? The person who is managing cattle every day is not the one who can decide whether to reduce stock numbers. Nor are people in such positions likely to contribute to village meetings because they do not own the cattle and cannot say much about them.

- Of the people interviewed, 43% are pensioners. Since there is no income to be drawn from communal farming, young people are not interested in farming activities. Therefore, as young people take up employment in urban areas, farming is left to the old people in the village. Is communal farming dying in Namibia?

Thus, the study gave a broad view of what must be included in the curriculum for the radio course and established the predominant existing knowledge, attitudes and practices among the target audience as well as the farmers' educational needs. The information is also used to determine the delivery methods for the target audience. For instance, because many farmers are old and, though literate, are at a low level of literacy, the course organisers capitalised on the use of radio coupled with highly visual materials and face-to-face guidance by well-trained group leaders.

Having looked at the results of the KAP study the steering group suggested that a curriculum and materials development workshop should be held and should take into consideration farmers' existing knowledge and skills so that they value and take ownership of the course. This workshop was held in July 2000. An extended steering group attended the workshop, including representatives of the traditional authorities. Mr John Thomas, a former BBC radio educational programme producer, facilitated the workshop. The participants decided on the number of topics that should make up the course – 12 radio programmes altogether – comprising ten course content broadcasts and two feed-back sessions. The course was to include the following modules in sequential order:

- The importance of cattle in our society
- The role of cattle in building our livelihood
- Cattle management – the breeding stock
- Cattle management – draught animal power
- Cattle management – getting the best out of your cattle
- Grazing management
- Basic animal health
- Common diseases in the north-central regions
- How to maintain healthy animals
- Cattle marketing

For each module there would be broadcasts of content themes, flipchart illustrations, handouts, group discussion questions and activities. During the KAP study farmers requested that the proposed programme be offered in the

afternoon (when they have completed their daily chores and their children are back from school) and during the dry season (when they have less work). NBC agreed to allocate a weekly time slot for the 12 weeks of the course between October and December.

To consolidate the KAP findings and enhance the course materials, in December 2000–February 2001 the researcher carried out a case study on the learning strategies of the target audience to find out the preferred style of learning. The case study was conducted in four villages, chosen from the villages that had participated in the KAP studies and using a randomly selected sample from the KAP participants. These villages will be among those at which the programme will be implemented. In total 24 farmers were interviewed (8 women and 16 men). The case study revealed that most farmers learn mainly by trial and error. It also found that farmers know quite a lot about cattle farming and only needed opportunities to share and practise their knowledge and skills. This information too will be used to shape the final development of the radio course, enhance the printed materials and assist in choosing and refining the delivery approaches that are likely to promote learning among adults from this type of background.

After all these studies and workshops the author embarked on course materials preparation and production. The preparation included collecting interview samples for broadcast scripts from farmers and technical experts. It is assumed that farmers' voices on the radio will encourage participation and farmers will experience ownership of the programme as their opinions are included in the programmes. A template that was developed at the workshop was used when collecting the interview scripts. The author worked with an illustrator to prepare the flipchart illustrations, wrote handout texts, and worked with NBC personnel to produce the radio programme. The programme will have a presenter (radio tutor) to link these individual interviews into a teaching and learning activity. These link scripts will be the most important educational messages or teaching elements of the whole radio course series. The radio programme will be broadcast in a local language of Oshiwambo that is spoken by 99% of people in the north-central regions.

The flipchart illustrations will be printed on A2 size paper and assembled with a cardboard supporting frame and stand suitable for the rural conditions. Once the materials production has been completed, group leader training will be held for 20 group leaders. The group leaders will be trained in leading a group, using the same materials as participating farmers. The idea is to experience the real

course materials and learn ways of steering the group discussion in the right direction. The radio course will be tested among the selected communities before it is used in the actual study. The final editing and production will then take place and the course can then be started. Farmers in ten villages will be organised into study groups of 20–25 to participate in the campaign.

The whole series will consist of a 15-minute radio broadcast, followed by a 45–60 minute group discussion. At the end of each lesson farmers in the study groups will be requested to discuss the questions that are given at the end of each presentation and to use the flipchart illustrations to aid the process. It is believed that discussion will energise adult learners and invite them to significant learning. Participating farmers will also be asked to try out selected activities at home. It is assumed that since this is a radio programme all farmers in the radio reception area will be listening and not only the farmers who are organised into groups. So the radio programme will invite all farmers who understand the local language to follow the course and find a neighbour or friend with whom to discuss the questions.

Conclusion

It is assumed that with good approaches educational programmes can reach the people who need them and assist them in keeping up with all the challenges and changes that are taking place in society. Good educational programmes that employ appropriate educational delivery approaches assist people to learn exactly what they need to learn and achieve the objectives of the learning activity. Good educational approaches also enable people to learn from one another in a familiar environment. To facilitate learning among the rural community and ensure sustainability of learning activities, capacity building is necessary. In many countries educated people leave rural areas for the economic green pastures of big towns. Rural folk remain to develop their villages with the limited skills and techniques they possess.

This programme is based on certain assumptions. By developing appropriate programmes that extend learning opportunities to rural areas it will be possible to ensure equity and prevent the brain drain from rural areas. This will enhance people's capabilities and build their confidence, knowing that they can play a part in their own development and that of their communities. If people are trained with the available media and in the right conditions, a change of attitude can occur and skills and knowledge can be gained. When individuals are engaged in discussion with their peers, they begin to influence one another and

in the process change their pre-formed beliefs, attitudes and practices. Only when people have learned and their attitudes have been influenced are they able to attain self-development by doing things for themselves and not being dependent on experts and government to do things for them. In the process they will develop skills, capabilities and learning capacities that will eventually affect their way of thinking.

The research will therefore reveal what happens when people in remote areas are offered an opportunity to learn from one another in their own environment as well as through the media. In so doing, it will assist in developing and refining adult education approaches that will enable farmers to learn new skills and improve their socio-economic status. The overall aim of the research project is to find ways of giving skills and knowledge, and influencing attitudes and practices in order to improve efficiency and productivity, which will support maximum utilisation of new knowledge for economic and social development. The outcome will be well-developed techniques and procedures that can be replicated in other areas of the country and on different subjects on a large enough scale to bring about development. At the end of the study recommendations will be made on how to spread the refined approaches and the conditions under which they should be implemented to other parts of Namibia and other vital adult learning opportunities. The Namibian Ministry of Agriculture, through its Regional Office Of Rural Extension Material Unit (REMU), has already expressed strong interest in adapting the methodology to extend and strengthen its own services in the north-central regions and elsewhere in Namibia.

Notes

- 1 S. Aijambo, Practical project paper submitted for the London University External Postgraduate Diploma in Distance Education, 1997 (unpublished).
- 2 *The Namibian Newspaper*, 1999.
- 3 FAO, 1998.
- 4 E. M. Rogers, with F. Shoemaker, *Communication of Innovations: A Cross-cultural Approach* (London: Collier Macmillan, 1962).
- 5 *Ibid.*, 15.
- 6 T. Dodds, and J. Mayo, *Distance Education for Development: Promise and Performance, The IEC Experience 1971-1992* (Cambridge: International Extension College, 1992).
- 7 I. Waniewicz, *Broadcasting for Adult Education*. (Paris: UNESCO, 1972).

- 8 T. Dodds, *Multi Media Approaches To Rural Education* (Cambridge: International Extension College, 1972).
- 9 C. Fraser, and S. Restrepo-Estrada, *Communicating for Development: Human Change for Survival* (London: I.B. Tauris, 1998).
- 10 R. Siaciwena, *Case Studies of Non-formal Education by Distance and Open Learning* (Vancouver: The Commonwealth of Learning, 2000).
- 11 B. Hall and T. Dodds, *Voices for Development: the Tanzanian National Study Campaigns* (Cambridge: International Extension College, 1974).
- 12 D. Warr, *Distance Teaching in the Village* (Cambridge: International Extension College, 1992).
- 13 T. Dodds, *Non-Formal and Adult Basic Education through Open and Distance Learning in Africa: Developments in the Nineties towards Education for All* (Windhoek: COL/UNAM-CES for UNESCO, 2000).
- 14 P. Freire, *Pedagogy of the Oppressed* (London: Penguin Group, 1972).

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