

Teacher upgrading as a measure to alleviate poverty through the distance mode of delivery

Judith W Kamau, University of Botswana

The need to equip primary, secondary and tertiary levels with academically and professionally qualified teachers has been a major concern for many developing countries since the early 1960s. Initiatives to train teachers via the conventional mode have eluded many countries due to limited resources. As a result these countries have experimented with various delivery modes, among them, part time evening classes and distance education. Distance education is selected because of its cost effectiveness in expanding access to educational opportunity without having to set up additional physical structures. It also affords aspirants, lifelong learning where people can learn what they want without foregoing their other social, economic and other activities.

But the ever evolving forms of learning, varied and challenging learner characteristics, limited academic space, limited personnel and the growth of new and fairly often unaffordable technologies have prompted governments to forge partnerships to share the limited human, physical and material resources in the provision of teacher education beyond institutional walls. While institutions generally agree on shared use of resources in order to arrest, poverty perpetrating factors, the dynamics involved demand a change in the organizational behaviour so as to avoid any conflicts during the process. This paper therefore discusses the dynamics of resource sharing in expanding in-service teacher education from the pre- independence to post-independence era in Botswana. The purpose of this paper is to demonstrate how distance education has been applied in the training and upgrading of teachers in Botswana as a measure to counter, poverty, ignorance and disease.

Country profile

According to the 2001 census, the population of Botswana is 1 680 900 with a population density of 3 people per km². It has a highly skewed population distribution, which is influenced by the Kgalagadi desert where people live in remote settlements spread over wide geographical areas. This settlement pattern makes it difficult for the government to provide education through the conventional means only.

Historical background to teacher upgrading via the distance mode in Botswana

At independence, Botswana was one of the poorest countries with a per capita income of approximately P60.00 which was equivalent to roughly US\$80.00 at that time (Thomas, 2004). The poverty situation was worsened by consistent occurrence of drought, in an economy that was dependent on cattle and subsistence farming. In the education front, Botswana inherited a poorly developed education system with very few if any trained indigenous teachers at all levels of education. It was not by accident that government's initiative was to train manpower within the shortest time possible, in an economy that could not support construction of schools, colleges at random. Other alternatives to provide the required human resources particularly in education had to be explored.

The earliest distance education initiatives in Botswana started in 1962 when a commercial correspondence college, the Central African Correspondence College (PVT) Ltd, based in the then Salisbury (now Harare), Southern Rhodesia, caught the attention of the then Protectorate's education authorities in Mafikeng, when fifty application forms were sent by the College to the Mafikeng education authorities. In the same year, the pioneer group of distance learners (teachers) in Bechuanaland enrolled for a two-year in-service training course for primary teachers which was taught through printed materials supported by radio broadcasts and face to face contact sessions. Following the success of this initiative, the government began to embrace correspondence education as an alternative mode of delivery in

order to overcome severe shortages of trained teachers which was created by the post-independence demographic pressure for primary education.

After independence, the government launched the Francistown Teacher Training project (1968-1973) by distance mode to quickly produce qualified primary school teachers. By the time this programme came to an end in 1973, over 700 serving teachers had been trained a combination of printed materials supported by radio programmes and face-to-face contact. Although the Francistown project was a one-off initiative to redress excess demand for qualified teachers, it nonetheless gave the government confidence in distance education as a viable alternative to teacher training.

The next government initiative in the provision of distance education was the setting up of the Botswana Extension College (BEC) in 1973, which started with assistance from the International Extension College (IEC) in Britain and became the first government secondary level correspondence education school. The principal mandate of the BEC was to widen access to secondary school education at both Junior Certificate and GCE O' Level through distance education. Its additional mandate, which never materialised, was to provide teacher training programmes for primary school teachers (Mokaeya, 1986). To meet these challenges, BEC used a combination of print, radio and some face-to-face contact as its main media.

At its early stages the BEC, in collaboration with the Ministries of Agriculture and Local Government and Lands, played a community extension role by explaining the Tribal Lands Grazing Policy and its implications to citizens. To achieve this objective, the BEC set up village development committees and used radio programmes to educate people about the utilization of the Tribal Lands Grazing Policy handbook. In collaboration with the Department of Community Development, the BEC also developed a literacy programme which was implemented between 1977 and 1978, to eradicate illiteracy in Botswana.

BEC's success in these activities resulted in the creation of its successor, the Department of Non-Formal Education (DNFE), in the Ministry of Education, in 1978. The DNFE was required to provide education for several client groups including adult learners, out of school youth and other people in need of pre-tertiary vocational training for career advancement, employment or self employment. It was also required to provide part-time education through evening classes particularly in the areas of Mathematics, Science, Setswana, and English using existing resources available in local secondary schools. In order to manage its affairs effectively, the DNFE created several organisational units, among them; the Correspondence Section which was later renamed the Distance Education Unit, The Literacy Section and the Evaluation Section. However the operations of the Distance Education Unit experienced problems due to:

- Lack of resources, in terms of personnel, space, equipment, budgetary constraints and lack of an effective information management system
- Understaffing and lack of personnel trained in skills for distance education
- Lack of institutional and professional status
- Lack of relevant learning materials to address the needs of out-of-school young people.

The constraints experienced by the DNFE were subsequently addressed by the report of the National Commission on Education of 1993, which, after recognising the potential of distance education in increasing access to education in a cost-effective manner, (Nhundu, and Kamau, 2002), recommended the creation of a semi-autonomous Distance Education College for Botswana to take over the activities of the Distance Education Unit of the DNFE. The Commission also recommended that the Distance Education Unit of the University of Botswana be adequately resourced to extend tertiary education to the people via the distance mode. As a result of these recommendations, Parliament legislated in 1998 the establishment of a semi-autonomous open and distance college, the Botswana College of Distance and Open

Learning (BOCODOL), and charged it with the responsibility of providing pre-tertiary level distance education programmes.

The 1995-1997 Botswana teacher in-service and pre-service project (BIPP)

Between 1995-1997, the government launched the Botswana In-service and Pre-service Project (BIPP) in collaboration with the Northern College, Aberdeen and Dundee, Britain, to upgrade Junior Secondary school teachers of english, maths, science and design and technology. The project was also expected to improve the quality of teacher training at Tonota and Molepolole colleges of secondary education. The BIPP aimed at training, between 30-40 university graduates to the MEd level using a modular approach where teachers studied their modules and wrote assignments at home and had face to face contact sessions with their tutors during school vacations. The project also comprised 120 weeks of out-of-country visits where trainees were attached to institutions in the United Kingdom and the region for hands on experience.

The BIPP programme was designed to link theory with practice by enabling participants to engage in critical analysis of the content in the modules and apply the knowledge acquired at their workplace. Accordingly, the participants were required to show in their written assignments evidence of practical application of knowledge acquired. Participants were to do twelve modules and a dissertation that was equivalent to four modules. For academic guidance and counselling, learners were assigned a personal tutor who offered academic advice through prompt feedback on their performance.

The secondary school management project

The Secondary School Management project was developed in collaboration with the University of Bath to equip secondary school head teachers with knowledge and skills which would enable them to manage and administer secondary schools more effectively. The first cohort of 24 head teachers joined the programme in April 1995, the second in August 1996, while the third cohort of 15 head teachers joined the programme between August 1998 and 2000/2001. The programme consisted of six modules plus a dissertation of 15,000-20,000 words. In addition, the students received face-to-face tutorials during school vacations and wrote assignments which were marked in-between school holidays. The mode of delivery combined self-study with face-to-face sessions delivered by lecturers from the University of Bath during school vacations. Each module was taught on a face-to-face basis for twenty hours with learners participating in seminars and group work after the lectures. In August 1999, the first fifteen graduates from the first and second cohorts graduated with their masters' degrees, while others were at different stages of their programme.

One major achievement from this project was that it was used as an example by the University of Botswana to develop a Masters programme in education which is now being offered through flexi-mode where participants attend lessons during the school holidays and submit assignments for marking during the school term.

The diploma in primary education by distance mode

The Diploma in Primary Education programme by distance mode was launched in 1999 to upgrade the academic and professional qualifications of primary teacher certificate holders to the diploma level. This in-service programme was meant to meet government's requirement that the minimum qualification for primary school teachers be pegged at the diploma level. This four year diploma, which is the same as the one offered in the four colleges of primary education in Botswana except for the mode of delivery, targets more than 9000 out of the 11600 in the primary schools who are holding Primary Teachers Certificates, (Ministry of Education, 2003). Currently the programme has enrolled 2400 students taking 13 subjects in the primary school curriculum.

Mode of delivery

The main mode of delivery is through printed modules supported by audio cassette tapes and face to face residential sessions which are carried out in colleges of education during school vacations in April, August and December. The purpose of the residential sessions is to enable the learners to interface with their tutors and their colleagues to discuss difficult concepts. Students also get access to libraries physical facilities such as classroom space, and laboratories for practical work and accommodation. Students have come to value these sessions because they get conducive atmosphere to study as opposed to their homes and schools where they do not get enough time to study due to their jobs, family responsibilities and other commitments. Apart from studying the modules, learners also prepare a teaching assignment portfolio in lieu of the teaching practice. They also submit a research project as part of their assessment requirement. The programme is assessed through assignments, tests and a final examination (per module). The other form of support is through text books and other learning materials which are distributed to each primary school or to a nearby strategic point such as a secondary school, the Botswana National Library outlets, Brigades and Village reading rooms. This is a cost effective way of availing learning materials on a shared basis.

Reactions by the learners to the programme

The trainees have to appreciate the programme since it came at a time when many of them could not find places in the four pre-service teacher training colleges. They have as such seen this programme as a breakthrough towards their achievement of higher qualifications in teacher education. When asked to comment on the programme they say:

- The programme has helped me to gain self esteem
- I earn my salary as I study
- I got promoted to a higher position after passing some of my modules
- I put what I have learnt into practice immediately
- My performance has improved and my pupils are happy
- I did not have to leave my family to attend training in a full time conventional institution.

Programme providers

The main partners are the Ministry of Education and the University of Botswana. The ministry of education is the main funding agency through the department of Teacher Training and Development (TT&D). The ministry recruits and admits students to colleges of education. The ministry has also allowed the use of the six colleges of education during the residential sessions. This shared use of resources is in line with Recommendation 77 of the (RNPE) which recommends shared use of resources for provision of conventional and out of school education programmes.

The University of Botswana is responsible for developing and distributing the course materials to students, organizing and managing the tutorials and paying writers editors and tutors. It is also responsible for quality assurance in course development and production and in the delivery of the programme. To ensure quality and parity of standards, the University of Botswana recruits part time course ware developers who are conversant with the content. The course materials are then taken through a rigorous content review and editorial processes before they are printed. Writers and editors are recruited from colleges of education and the University. This collaboration in materials development has ensures adequate consultation on the curriculum before the final learning materials are produced.

One set back that this programme has experienced is the delay in the development of learning materials particularly in science, maths and practical subjects. Part of the delays however occurred due to limited human resources in these subjects. Specifically materials development and production processes were constrained by:

- Difficulties in getting writers and editors of study materials who were motivated to write within scheduled deadlines perhaps as a result of lack of culture to write
- Delays in the production and distribution of study materials as a result of a delayed materials development process
- Lack of understanding of the requirements of a distance education programme on the part of the university management perhaps as a carry over from the conventional mode
- Delayed revision of rates of payment for part time work, which de-motivated some of the potential writers, editors and tutor/markers
- A drive to expand distance education programmes without a parallel recruitment of fulltime staff to service these programmes which stressed an already very thin staff
- Delays in replacing staff who moved on to greener pastures or went to school resulting in pile up of work particularly in the editing section, word processing of study materials and in the records section
- Lack of study centers where students could get vital services such as reference materials, photocopying and a quiet room to study
- In the area of learner support this programme has experienced a number of problems which include:
 - Inadequate physical facilities: the colleges of primary education were built to cater for smaller numbers of students
 - Lack of adequate computer equipment to teach computer awareness courses
 - Students do not have access to computers in school as some schools are not yet computerized
 - Lack of contact with their tutors and colleagues outside the residential sessions resulting to feelings of Isolation
 - Poor infrastructure in some regions
 - Lack of well grounded tutors in open and distance learning practices
 - Conflict of interest among tutors where the conventional programmes take advantage over the distance mode.

Resourcing distance education

Distance education thrives on the utilization of existing resources without re-inventing the wheel. However and in order to access available resources there is need for a government policy that sets out how the philosophy of sharing resources can be implemented. In this regard, distance education institutions need to:

- Create a national network of student support services that is sensitive to the needs of learners
- Set up mechanisms that facilitate efficient materials development, production and distribution so that students can complete their studies as scheduled
- Develop a pool of tutor/markers to service distance education programmes so that examination results can be released as scheduled
- Set up competitive rates of payment, which will attract and facilitate retention of the best part time staff available
- Collaborate with other distance education providers such as the Botswana College of Distance and Open Learning (BOCODOL), in the shared use of resources, and above all,
- Work within a clearly defined national policy framework that informs the shared use of resources.

The way forward

Given the views expressed in this paper there is need for the nation to:

- Explore ways and means of consolidating the shared use of resources to put the to optimal use

- Create a distance education unit within the Ministry of Education to coordinate and mainstream planning and implementation of distance education programmes and ensure equitable distribution of resource among all providers
- Initiate a vigorous capacity building exercise to empower local staff in open and distance learning practices
- Carry out a deliberate sensitization campaign to inform the nation about the potential of open and distance learning as a tool of expanding educational opportunity to all who deserve it but cannot be spared from their nation building duties to attend full time conventional programmes.

Conclusion

This paper set out to explore the dynamics of sharing resources in open and distance learning. I have argued that for institutions to benefit from the limited resources there is need to promulgate a national policy that enhances optimal use of available resources. Using the diploma in primary education by distance mode programme and other manpower development initiatives before it the government has consistently strived to train and in-service teachers using alternatives beyond the conventional mode of delivery. This approach has enabled the government to address issues related to poverty by saving on conventional education and utilizing funds that would have been spent to finance other demanding areas such as the HIV/AIDS pandemic.

References

- Botswana, Republic of (1993), *Report of the national commission on education*, Gaborone, Government Printers.
- Botswana, Republic of (1994), *Government paper no. 2 of 1994: revised national policy on education*, Gaborone, Ministry of Education.
- Botswana, Republic of (1996), *A framework for a long term vision for Botswana: presidential task group for a long term vision*, Gaborone, Ministry of Education.
- Lentell H (2004), 'Framing policy for open and distance learning' in Perraton H and Lentell H (eds), *Policy for open and distance learning*, London, Routledge.
- Ministry of Education. (2003), Botswana country submission at the all Africa ministers of education conference on open and distance learning held at Cape Town International Convention Centre, Republic of South Africa 31 January- 05 February 2004.
- Mokaeya B (1986), *Information brochure: department of non-formal education*, Gaborone, Ministry of Education.
- Nhundu T J and Kamau J W (2002), 'From correspondence to open and distance education: the Botswana experience' in Perraton H and Lentell H (eds), *Policy for open and distance learning*, London, Routledge.
- Thomas P Y (2004), *Growth in distance learning and its implications: the case of Botswana*, Unpublished paper.