

TEACHER DEVELOPMENT THROUGH OPEN AND DISTANCE LEARNING: THE CASE FOR ZIMBABWE

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ABSTRACT

The last article is from ZIMBABWE . It is entitled as “TEACHER DEVELOPMENT THROUGH OPEN AND DISTANCE LEARNING: THE CASE FOR ZIMBABWE” and written by Caleb KANGAI and Richard BUKALIYA from Zimbabwe Open University, Marondera. This article that is a case study of distance teacher education at the Zimbabwe Open University, is part of an ongoing longitudinal study the two researchers are undertaking at the Zimbabwe Open University (ZOU) concerning issues of quality and effectiveness in open and distance learning (ODL). The article argues that distance teacher education has the potential to solve the current and future problems of teacher shortage in Zimbabwe and elsewhere. Data for the present study were collected over a period of two years through personal experience, participatory methods, observations, document analysis, informal discussions and illuminative methods. On the basis of the present findings, effective distance education programmes would require the adoption of the following key strategies:

- Winning government support for distance teacher education,
- Setting up a directorate for the coordination of distance teacher education,
- Adoption of the partnership model in the training of teachers.

Key Words: Teacher development, Open and Distance Learning.

INTRODUCTION

In general, Africa is struggling to give effect to the Education for All (EFA) mandate and to achieve the educational Millennium Development Goals (MDGs) (UNESCO, 2005). Research studies into teacher education in Africa have indicated that acute shortages of teachers exist and rural communities are the most challenged in recruiting and retaining qualified teachers (Moon, 2006). In some countries, the shortage of teachers is now formally acknowledged as a national crisis. Many countries in Africa are facing a number of challenges in teacher development that include:

- Inadequate or poor continuous (in-service) teacher development and teacher training facilities;
- Shortage of trained and qualified teachers;
- Lack of opportunities for continuous professional development;
- Shortage of reference and training materials for teachers;
- Underdevelopment and under-utilization of Information Communication Technologies (ICTs) to benefit teacher training and development and
- Depletion of teachers due to HIV/AIDS and the decline in the number of people entering the teaching profession.

The demand for teachers has seen many countries in Sub-Sahara Africa adopt innovations that call for a paradigm shift in the traditional models of teacher education. One of the innovations, aimed at improving the quantity and quality of teachers, is to use open and distance learning in teacher development. It is generally accepted that distance education can increase the quantity of trained teachers. However, there are fears that distance education would increase the quantity of teachers at the expense of teacher quality (Chakwera and Saiti, 2005; Chakwera and Saiti, 2005). Local research studies into distance teacher education are still very scanty. Thus in 2005, UNESCO commissioned a number of case studies because of demands of Member States for guidance on implementing programmes of distance education for teachers. The studies were intended to document experience on which to base the guidelines for teacher education at a distance. These case studies have been a source of very vital information. In the present study the two researchers reviewed twenty of the case studies on distance teacher education in order to make a well informed and meaningful contribution to the quantity/quality debate in distance teacher education. More specifically, we wanted to find out how open and distance learning were being used in teacher education, how effectively they were working, and what methods they were using. In asking how effectively it was working, we wanted to examine its record in attacking the major problems confronting teacher education. This article is part of a longitudinal study the two researchers are undertaking at the Zimbabwe Open University (ZOU) concerning issues of quality and effectiveness in open and distance learning (ODL). The article argues that distance teacher education has the potential to solve the current and future problems of teacher shortage in Zimbabwe and elsewhere. It is our conviction that if open and distance learning for teachers is effective, and working on a big enough scale, in other countries, then it is the key to solving many of our educational problems including teacher shortage.

BACKGROUND OF THE STUDY

In Zimbabwe, distance teacher education was first introduced in the training of primary school teachers in 1983 in order for the country to meet the critical shortage of primary school teachers brought about by the expansion of the education system (Zvobgo, 1986; Gatawa, 1986). At independence in 1980, Zimbabwe faced political, economic, and social challenges that normally accompany attempts to build a new nation. One of the challenges was experienced in introducing reforms in the education sector. The government undertook massive and unprecedented expansion of education at the primary level. In 1980, Zimbabwe had 2,401 primary schools with an enrolment of 819,586 pupils. By 1989, the country had 4,504 primary schools with an enrolment of 2,274,178 pupils (Zvobgo, 1986). Between 1980 and 1988, as table 1 shows, the number of both trained and untrained teachers at the primary level increased dramatically.

Table 1: Teacher Numbers at the Primary Level, 1980-88

Year	No. of Trained Teachers	No. of Untrained Teachers	Total
1980	20,422	8,031	28,455
1981	22,654	15,119	37,773
1982	23,699	21,768	45,465
1983	25,954	26,548	52,502
1984	30,424	24,000	54,424
1985	31,496	26,610	56,675
1986	31,496	26,752	58,248
1987	26,133	30,987	57,120
1988	29,589	28,173	57,762

Source: Ministry of Education – Annual Reports (1980 - 1988).

The expansion of primary education meant that more trained teachers were needed. The demand for teachers outstripped the supply from the country's conventional colleges. For example in 1983, Zimbabwe needed 26,548 primary school teachers but teachers colleges could only supply 1,244 teachers (see tables 1 & 2).

Table 2: Output of Teachers from Conventional Colleges (1980-83)

Year	Conventional College Output
1980	680
1981	666
1982	642
1983	1,244

Source: Ministry of Education data.

It was increasingly clear that conventional teachers colleges were unable to meet the growing demand for trained teachers. The shortage of teachers was exacerbated by the fact that teachers colleges were experiencing a decline in student enrolments.

The Zimbabwean government with financial and material assistance from United Nations International Children's Education Fund (UNICEF) introduced a distance teacher education programme, the Zimbabwe Integrated Teacher Education Course (ZINTEC) for the training of primary school teachers. Programme evaluations by Chivore (1986) and (1989) indicated that a total of 17,455 teachers, trained through ZINTEC, helped to alleviate the demand for trained teachers. The programme was hailed as a huge success and ZINTEC teachers were considered highly qualified and even better than conventional teachers in terms of practical skills and experience gained through a lengthy teaching practice. Speaking on the sidelines of the Regional Open and Distance Learning awareness workshop for media practitioners in Johannesburg in South Africa on 11 February 2011, Professor Richard Siaciwena said the ZINTEC programme was the best on the continent and continued to inspire improvements in education standards. The quantitative and qualitative demand for teachers in Zimbabwe and the success of the ZINTEC programme became very strong reasons in support of the introduction of distance teacher education at the University of Zimbabwe in 1993 (Gatawa, 1986). Distance education started when the department of education set up the Centre for Distance Education (CDE) which initially offered one programme - the Bachelor of Education degree aimed at equipping school heads with skills in educational administration, planning and policy studies (BEDEAPPS). The CDE later transformed into the University College of Distance Education which subsequently transformed into the Zimbabwe Open University (ZOU) through an Act of Parliament Chapter 12: on 1 March 1999.

Since 1999, the ZOU has established itself as the second largest open and distance Learning institution in Africa, second only to the University of South Africa (UNISA). The ZOU now boasts of four Faculties and offers more than 60 diploma and degree programmes. The growth of distance education at the ZOU has seen the Department of Education introducing more teacher education programmes. During the time of the present study, in 2010, the department of education was offering 12 teacher education programmes:

- Diploma in Education for Primary school teachers
- Diploma in Education Secondary school teachers
- Bachelor of Education Degree Early Childhood Development
- Bachelor of Education for Secondary School Teachers
- Bachelor of Education Curriculum Studies
- Bachelor of Education (Technical)
- Bachelor of Education (Youth Development)
- Post Graduate Diploma in Education
- Bachelor of Education in Educational Management

- Master of Education in Educational Management
- Master of Philosophy in Education
- Doctor of Philosophy in Education

Although there is wide recognition that teacher education need to be integrated, in ways that operationalize lifelong learning for teachers, the resources allocated to it are usually inadequate and the opportunities are very few. Can open and distance learning respond to these challenges? Robinson (2003) notes that ongoing evaluation and impact analysis of distance teacher education programmes is generally weak and that these weaknesses are exacerbated by the complexities of distance education delivery: "Most reports are largely descriptive, only sometimes including detailed statistics and often lacking well-evidenced findings on outcomes" (Robinson 2003:196-7).

The present study attempts to offer some answers, in describing a range of uses of open and distance learning for both initial and continuing teacher education.

STATEMENT OF THE PROBLEM

Teacher education has become a topical issue in most developing countries. Many teachers are untrained or under-qualified or teaching subjects in which they are not qualified or trained. The demand for teachers in Africa is rising due to Universal Primary Education (UPE) and Education for All (EFA) targets, increasing enrolments, the migration of teachers to neighbouring countries, and the loss of many teachers because of HIV and AIDS. In the rural remote areas of the country, untrained or under-qualified teachers make up a substantial proportion of teachers. The question to be addressed in this article is: Can distance education quantitatively and qualitatively meet the demand for teachers?

In order to address this question, the present study was guided by five sub questions.

- Why is distance education used for teacher development?
- What is the role of distance education in the context of teacher education?
- Can distance education meet the quantitative and qualitative demand for teachers?
- What are the challenges and opportunities in training teachers through distance education?
- What is needed for effective teacher education through distance education looking to the future?

Importance of the study

The present study was undertaken in an attempt to address the issues of quantity and quality in distance teacher education. Findings of the present study contributes vital information to the theory and practice of teacher education at a distance and helps to inform both educational policy makers and distance teacher educators on the potential of distance education in the improvement of the quantity and quality of teachers. This study also aims at generating research interest into distance education in general, and distance teacher education in particular.

LITERATURE REVIEW

The Concept Open and Distance Learning

Saide and Saide (2003) have defined distance education as an educational process in which a significant proportion of the teaching is conducted by someone removed in space and/or time from the learner. Open learning, in turn, is an organized educational activity, based on the use of teaching materials, in which constraints on study are minimized in terms either of access, or of time and place, pace, method of study, or any combination of these. In the context of teacher education, we have found it useful to understand distance education not as a mode of delivery with one identity, but rather as a collection of methods for the provision of structured learning in situations where students are unable primarily to attend fixed classes at a centralized

venue and in the physical presence of a teacher. In the present study we consider the term “open and distance learning” as an umbrella term to cover educational approaches (print media, telephone, computers and television) used to reach teachers in their schools, provide learning resources for them, or enable them to qualify without attending college in person. The flexibility inherent in open and distance learning, and the fact that it can be combined with a full or near full-time job, makes it particularly appropriate for the often widely distributed force of teachers and school managers.

Theoretical Framework

Teacher education has been an issue of major debate and controversy over the past decade (Booth, Furlong and Wilkin, 1990). In Zimbabwe, the training of teachers through the distance education mode is generating much interest and heated debate. Much of the discussion centers round the roles of the training institution and the school in providing a coherent, relevant and effective course with political support from key stakeholders. There are fears that training teachers through distance education would affect teacher quality (Dellana, Collins, and West, 2000). Although, several comparative studies carried out in Zimbabwe and elsewhere have demonstrated that there is no significant difference in quality between distance education and conventional education programmes (Chivore, 1989; Verduin and Clark, 1991; Phipps and Merisotis, 1999; DeSantis, 2002; Russell, 2000), distance education in Zimbabwe is yet to win the battle for recognition as an alternative form of education particularly in teacher education. The major issue of concern is how distance teacher education can effectively deal with the theory/practice paradigm.

Models of Teacher Education

Basically, the theory/practice debate has been dominated by three teacher education models. The first model is the apprenticeship model or school based model. In this model, the training of teachers should be school based with the experienced classroom teacher playing the major role. All that is needed is for a trainee teacher to spend time with an experienced teacher in school to pick up “tips on teaching”. This idea of apprenticeship has been attacked by some educationists. The training is carried out in individual schools and lacks uniformity. Each school has its own professional standards. The model emphasizes the acquisition of practical teaching skills at the expense of theory. Wragg (1984) argues that this approach de-professionalizes both teaching and teacher training because the model lacks training in theory of education.

The second model is the college based model which argues that much of the training must take place in the training institution with the school facilitating teaching practice for a shorter period (Booth, Furlong and Wilkin, 1990). In Zimbabwe this has been the traditional method used by conventional teachers colleges. The training programme is three years. Trainee teachers spend the first year in college studying the theory of education and professional foundations, the second year on teaching practice in the schools and the third year back in college to write the research project and examinations. The major limitation of the model is that it puts more emphasis on theory of education at the expense of practice and takes too long to produce qualified teachers especially in the face of a national crisis of teacher shortage.

The third model is the equal partnership model involving the training institution, the school and the government, with the training institution teaching theory, the school facilitating teaching practice and the government providing funding. The training programme is normally four years. Students spend the first and third years in college studying theory of education and professional foundations. The second and fourth years are spent on teaching practice in schools.

These three perspectives (school based model, college based model and equal partnership model) have characterized the development of teacher education in Zimbabwe. However, the demand for qualified teachers brought about by the expansion of the education system at independence (1980) and failure by conventional colleges to meet this demand, has forced Zimbabwe to search for new models in the training of teachers. The trend in training teachers is now shifting away from the traditional conventional mode to a more flexible

approach through open and distance learning. However, distance teacher education programmes at the Zimbabwe Open University are experiencing a number of challenges that threaten their very existence. The present study, therefore, examined challenges and opportunities faced by ZOU in the training of teachers through distance education.

RESEARCH DESIGN AND METHODOLOGY

The present study was a case study of distance teacher education at the Zimbabwe Open University. Data for the present study were collected in two stages.

Stage 1: Inspired by the motivation to understand the challenges and opportunities inherent in the distance teacher education programmes offered by the ZOU, the two researchers/lecturers working in the department of education and based at the Zimbabwe Open University Mashonaland East Regional Centre, collected data and information for the present study over a period of two years through personal experience, participatory methods, observations, document analysis, informal discussions and illuminative methods.

Stage 2: The two researchers reviewed twenty case studies on distance teacher education programmes in operation in Africa and elsewhere randomly selected from the internet and through reading books and journal articles. Analysis of these case studies focused on the five sub-questions that guided the study. The presentation and discussion of research findings that follows, is guided by these research questions and refer to some of the cases we analyzed.

DISCUSSION OF FINDINGS

The first question the study sought to address was, “why is distance education used for teacher development?”

In the present study we identified and analyzed a number of innovative programmes (case studies) that are in operation in Africa and elsewhere from which we can derive inspiration (see Appendix 1).

The analysis of case studies we undertook revealed a number of reasons why different countries introduced distance education methods in the training of teachers. (See table 3 below).

Table 3: Reasons for Introducing Distance Teacher Education N=20

Reason	No	%
1. To meet the demand for teachers	18	90%
2. In service training of teachers	12	60%
3. Pre-service training of teachers	5	25%
4. Up grading teachers' skills	10	50%
5. Low training costs	2	10%
6. Increased access to higher education and attainment of equity	6	30%
7. More teaching practice	8	40%

In many developing countries (90%) distance teacher education was introduced so as to solve the problem of teacher shortage. Traditionally, teachers were trained in teachers colleges using the conventional college-based model. However, conventional methods can no longer meet the present and future demands for teachers. Factors responsible for the shortage of teachers include the following;

- In Africa for example, the attaining of political independence saw many countries adopt educational reforms that democratized each country's education system. This resulted in an unprecedented increase in school enrolment. Therefore, a faster and cheaper method had to be found to train teachers on the job.
- The HIV/AIDS pandemic is also taking its toll and reducing the number of trained teachers.
- The poor salaries and conditions of service have also made the teaching profession less attractive to prospective teachers. Hence there is a marked decline in the number of people training as teachers.

One strategy many countries have adopted is to train more teachers. To this end distance education has been found to be the most appropriate and desirable approach. A number of reasons have been put forward in support of distance teacher training. Distance education is cheaper than conventional education. No facilities such as classrooms or hostels are required to house students like as is the case in conventional colleges. In distance education, the average cost of educating a student actually decreases as the enrolment increases. In a country experiencing a critical shortage of trained teachers like Zimbabwe, distance education is the way to go as teachers are trained on the job and do not have to leave their work or take study leave. Distance education also addresses the theory/practice question more effectively in that learnt skills, methods and techniques are applied in the classroom immediately rather than wait for the future when students are on teaching practice. As students are trained on the job, they get to master the practical skills of the organization and management of the different school activities. New developments in information communication technology also make distance education more attractive and convenient as people can now study in the comfort of their homes and at their work places.

In Malawi distance teacher education was introduced at Domasi Teachers College in order to increase access to higher education and to reduce gender disparity (Chakwera and Saiti, 2005).

In Nigeria the National Certificate in Education (NCE) programme offered through distance education by the National Teachers Institute, provides an alternative but equivalent route to initial teaching qualifications for working primary school teachers in a country very short of qualified teachers and where conventional college output cannot meet demand (Aderinoye and Ojokheta, 2004).

The second question to be addressed by the present study was, "What is the role played by distance education in the context of teacher education?"

Research has shown that distance teacher education can play a crucial role in two different but sometimes overlapping areas of teacher education: initial professional education, and continuing professional development.

There are a number of countries that have used distance education in initial teacher education - the China Television Teachers College, the National Teachers' Institute in Nigeria, the PGCE programme of the UK Open University are good examples. In these countries distance education programmes are used to provide initial training (pre-service or in-service) for different levels of student teachers, for those with secondary-level entry qualifications in China and Nigeria to graduate entry in the United Kingdom. In pre-service programmes student teachers are trained before they are engaged as teachers in the schools, whilst in-service programmes are meant for teachers already employed as untrained teachers in the schools. Both teachers study for the initial teaching qualification.

In Zimbabwe distance education was used in the initial training of teachers through the ZINTEC programme. The Zimbabwe Open University offers initial teacher training through the Early Childhood Development (ECD) Degree programme for pre – school teachers, the Diploma in Education for Primary teachers and Diploma in Education for Secondary teachers.

Distance education can also be used for teachers' continuing professional development. This training is characterized by a diversification of provision, in terms of types of programmes, duration, management, technology and audience, and is an area in which distance education can also play a significant role. One good example of continuing professional development through distance education is provided by the Burkina Faso case. In Burkina Faso over a quarter of the country's head teachers (whose professional development is increasingly seen as a key element in school effectiveness) developed new knowledge and skills through distance education within four years. This served at least three functions: it furthered their careers, built capacity in the head teacher cohort and provided professional development.

At the Zimbabwe Open University, continuing professional development of teachers is provided through the Bachelor of Education in Educational Management (BED-Management), Master of Education in Educational Management (MED-Management) and Doctor of Philosophy in Education (DPhil Education). The BED-Management, MED- Management and DPhil programmes are in-service teacher programmes aimed at capacity building by equipping officers in the educational administrative positions with relevant administrative, planning and policy skills.

The third question the study dealt with was “Can distance education meet the quantitative and qualitative demand for teachers?”

Quantitative output of distance teacher education programmes

Distance education programs seem to be the best tool to bring down teacher shortage. For example, the distance teacher education programme implemented at Domasi Teachers College in Malawi was able to increase its annual intake from 180 to nearly 914 because the distance education program was recruiting at least 734 student teachers in the two years of its operation. The output of Domasi College alone was more than what all colleges were producing together through their regular programs (Chakwera and Saiti, 2005). In Burkina Faso a programme meant for the development of head teachers trained seventy head teachers in the first year, 920 heads in the second year and 1275 in the third year (Jean-Francois, 2004). In China, China television teachers college between 1987 and 1999, assisted 717,300 unqualified primary teachers to gain teacher certificates and 552,000 unqualified secondary school teachers gained a teaching diploma. Another programme to develop primary school teacher knowledge and skills in child guidance in India, churned out a total of 6,546 teachers between 1993 and 2001.

Data available for Zimbabwe indicate that of the original 7,353 candidates admitted into the ZINTEC programme, 5,887 (80.0%) passed. Of these, 236 (3.2%) obtained distinctions. The average failure rate was 1.5%. according to Gatawa (1986), the pass rates for the ZINTEC programmes were so impressive that they compared favourably with those of the conventional system (See Table 4).

Table 4: Candidates admitted and those who completed the course between 1981 and 1988 under the ZINTEC Programme

College	Admitted		Passed		Distinction		Fail	
	N		N	%	N	%	N	%
Morgan	2559		2014	78.8	66	2.5	41	1.6
Marymount	1815		2413	78.1	73	4.0	20	1.1
Gwanda	1461		1224	86.0	33	2.2	24	1.6
Andrew Louw	1518		1236	86.6	64	4.2	29	1.9
Total	7353		5887	80.0	236	3.2	114	1.5
College	Referred		Deferred		Dropouts			
	N	%	N	%	N	%	N	%
Morgan			277	10.8	221	8.6	6	.2
Marymount			183	10.1	191	10.5	8	.4
Gwanda			173	11.8	36	2.4	4	.2
Andrew Louw			139	9.1	109	7.2	5	.3
Total			772	10.5	557	7.6	23	.3

According to Gatawa (1986:21), the dropout rate for the ZINTEC programme was given at .3% and this was statistically insignificant. In fact, the programme was so attractive that its numbers were continuously augmented by “drop-ins” from the conventional system (Gatawa, 1986:21). What Gatawa termed “drop-ins” were student teachers who left conventional colleges to join the ZINTEC programme.

The ZINTEC programme was structured in such a way that teachers had to spend more time on teaching practice in the schools. This was a deliberate move to alleviate the shortage of teachers in the schools.

At the ZOU between 1997 and 2002 a total of 6,222 school heads graduated with a Bachelor of Education in Educational Management and a total of 325 students graduated with a Master of Education degree in educational management between 2001 and 2002 (ZOU graduation Handbook from 1997 – 2002).

Quality, Effectiveness and Outcomes of Distance Teacher Education at the ZOU

An issue that has continued to attract attention of open and distance learning (ODL) educators, scholars and researchers is how ODL institutions, whatever their structure, context or circumstances, can assess their own quality (Myrdal, 1994). Kangai, Bukaliya, Musika and Mapuranga (2011), note that some critical questions that continue to fuel the “distance education” quality debate are; what makes distance education an experience that would be described as one of quality? How can distance education improve the quality of the ODL it offers? How can an institution providing ODL assess its own quality effectively? Agreeably, all institutions providing ODL will have some existing systems and procedures for assessing the quality of what they do. But not all have addressed the assessment of quality within their organizations in a systematic way as much as they need to (Mertens, 2005). Challenges facing ODL institutions are that procedures for assessing quality can be ad hoc, piecemeal, unsystematic, too reliant on individual discretion, and standards of practice can be unnecessarily inconsistent and variable.

According to a study by Chakwera and Saiti (2005) the distance teacher education provided at Domasi Teachers College compared favourably in terms of quality with the conventional programme.

In Nigeria quality assurance in distance education is undertaken by the National Commission for Colleges of Education (NCCE). This body visits centres, appraises the quality and quantity of tutors and sets the grading and

assessment system. Teaching practice and examination scripts are externally moderated. The learning materials are acknowledged to have a value wider than the distance education programme alone and have been used in other West African countries (Sierra Leone, Gambia and Ghana).

The ZOU is one of the few ODL institutions that have established a department responsible for quality assurance of its programmes. Quality assurance measures include the use of team approach in the production of learning materials, external assessment of courses and modules, and the external moderation of question papers and examination scripts. To keep the study materials up-to-date, the modules are revised every five years and reviewed by external assessors. Turnaround of assignments takes two weeks to give students' feedback within a specified time. Quality assurance for teaching practice is provided by the students teaching practice files, in which students record their activities and lesson plans and the assessment of teaching practice according to a common set of criteria plus a report by the supervising teacher to ZOU. ZOU teacher programmes, like those from conventional institutions, enroll students with 5 'O' levels including English and Mathematics. The programmes and materials are developed with the input of external assessors who are also involved in assessing students' work and performance. The materials are of high quality and widely used outside the programme by schools and other training providers.

According to a top Zambian academic, Professor Richard Siaciwena (2011), teacher education at the Zimbabwe Open University was among the best in Africa. Siaciwena, a proponent of distance education, argues that ODL as a learning route provides better benefits to learners than conventional systems. Amongst such benefits is increased quality, immediate knowledge application and enhanced graduate competence.

The fourth question was: "What are the advantages and challenges faced in training teachers through distance education?"

Advantages of Distance Teacher Education

There are some noticeable advantages for distance teacher education programmes which should be highlighted or registered in a country experiencing a perennial teacher shortage such as Zimbabwe.

Teachers pursue their studies without withdrawing their services, as it tends to be the case when serving teachers are admitted in a conventional face-to-face program. Teachers on training have an immediate opportunity to apply the knowledge and skills that they learn because they are in contact with students on a daily basis. This has an immediate impact on the quality of teaching and learning that goes on in the classroom. The increase in enrollment does not need a corresponding increase in teaching personnel. Distance education has made a big stride in ensuring women's participation in teacher training at a higher level. The home study provision has enabled pre- natal and ante- natal mothers to pursue their studies without disruptions while students in similar conditions in the regular program tend to be withdrawn on health grounds. There is no doubt that distance education offers an opportunity to remove the gender disparities that have characterized a number of education systems. For most women, ODL helps overcome social constraints that limit their ability to travel to pursue higher education (Allsop, 2008). Distance education is a sure way of increasing access to higher education in a country where the greater part of its limited resources are spent for the benefit of the majority in basic education. Distance teacher education provides for flexibility in the progress of student teachers because it is not tied to the fixed calendar of an academic year. For example, if the student teacher, for some reason, has not been able to complete courses, they may be allowed to take extra courses in addition to those uncompleted as they move to the next segment of the program. Morrison and Pitfield (2006) argue for some flexibility in course entry and exit points, for self-study modules with negotiated deadlines, flexible start dates, the possibility of extended time, recognition of prior learning and exploration of the implications for tutors' teaching beliefs and workload factors. If for some reasons, the student teachers withdraw from active studies, they can pick it up from where they stopped whenever they want to resume the studies. In the conventional program, the current practice is that such students would normally be made to repeat the whole

year because there are no provisions for students to join the program at any other time rather than the beginning of an academic year.

Challenges

Despite its advantages and the potential to increase the quantity of trained teachers, distance teacher education continues to face a number of challenges. Distance teacher education programmes continue to be marginalized. Some of the serious challenges confronting these programmes at the Zimbabwe Open University include low enrollments, low retention rate and low completion rate. It is generally accepted that the programmes have been less successful than expected. The present study established some of the most serious and most frequently mentioned problems affecting distance teacher education. These problems include delays in module distribution, shortage of reference materials, management of teaching practice and stakeholders' perceptions.

Learning Materials

One of the fundamental principles of distance education is the provision of opportunity for students to study according to their own learning pace or speed (Keegan, 1990). For this reason, a distance education system presupposes that every student receives all the course materials at the beginning of the program so that she/he can design his/her own study timetable in the light of the overall schedule of the program. However, some ODL systems fail to provide students with all the learning materials. In a distance education system where print medium is employed as the sole means of content delivery, students should receive the learning materials long before the dates fixed for tutorial programs. The intention here is to give students a reasonably sufficient amount of time to study the materials independently, work on the assignment questions and areas of difficulty before the actual date of the tutorial session. Consequently, the fundamental opportunities which a distance education system provides for each student to study the course materials independently and in accordance with his/her own learning pace and also to receive tutorial support pertinent to his /her own learning problems have been disregarded in the present system of ODL education (Willis, 1993; Keegan, 1990). Although the Zimbabwe Open University has managed to provide modules for all its teacher education programmes, challenges are sometimes experienced in the distribution of modules to students.

Library Services

It has been the primary challenge of distance education programs to provide current, relevant information for the distant students (McGreal 1995). Dillon, Gunawardena, and Parker (1992) discovered in an evaluation of learner support that: "Library resources are very important to distance students as the majority of them (57.3 percent) indicated that success in the course required access to library materials." As teacher education embraces distance education, libraries find themselves playing a pivotal but ever changing role of providing relevant information to a population that may never set foot into the library building. The challenges facing distance teacher education at the ZOU include the following:

- Inadequate library resources. The library has inadequate referencing materials such as text books and journals.
- The text books are too old and outdated (Kangai and Mapolisa, 2008)
- The library uses manual records since it lacks modern technology such as computers
- The library has no internet connectivity and students have no access to e-resources (Kangai and Bukalia, 2010).

According to Dillon, Gunawardena, and Parker (1992), the most serious challenge facing libraries in developing countries is that whilst the demand for the introduction of new technologies is on the increase, libraries lack the capacity to keep pace with the demand for new technology. Poor library resources and over reliance on modules will impact the quality of distance education programmes negatively.

Teaching Practice

One of the main attractions to teacher education at a distance is that the mode has the potential to effectively train teachers without taking them out of the classroom. Despite this great advantage in teacher education at a distance, there are problems, one of the main ones being the assessment of teaching and classroom performance in schools. Several studies in distance teacher education reveal that the organization of teaching practice for teacher trainees presents both logistical and educational difficulties (Makau, 1993; Oliveira & Orivel, 1993; Prescott & Robinson, 1993). Finding the means to assess teacher trainees on teaching practice eludes most distance education institutions. Logistical problems arise out of a need to supervise in-service teachers' work in the schools that are at a considerable distance from each other and from teacher educators (Perraton, 1993). Educational difficulties arise from the old problem of integrating theory and practice (Duschl and Waxman, 1991).

These organizational difficulties, have led some distance education institutions to abandon the supervision of teaching practice and have adopted various alternatives in attempts to meet its supervision needs. For example, in Nepal, peer-teaching sessions were arranged to introduce a practical element to teacher education (Holmes, Karmacharya & Mayo, 1993). In Brazil microteaching was incorporated into face-to-face sessions with student teachers (Oliveira & Orivel, 1993). The British Open University (OU), while not supervising teaching practice, has tried to link theory and practice through inviting teachers to report on their classroom experiences of ideas and practical activities covered in the course (Perraton, 1993).

Although teacher education at the Zimbabwe Open University is rated among the best in Africa (Siaciwena, 2011), there are some challenges experienced in the organization and management of teaching practice that need to be addressed. These challenges include:

- Lack of capacity to supervise student teachers
- Lack of political support of the government,
- Lack of collaboration between the University and the schools.

Perceptions of Stakeholders

Out of the various problems facing distance education today, a very important one is how it is perceived by the individuals involved in it. Despite the splendid role and increased popularity of open and distance learning, the quality of teacher education via distance education has been called to question (Dede, 1996; Harrison 2001 as cited in Peat and Helland, 2002). Different people perceive the advantages of ODL differently and their perceptions have influenced attitudes towards the acceptance and use of ODL in the system in our country and elsewhere. The tutors and other stakeholders' perceptions have an enormous effect on the successful implementation of distance teacher education programmes. People are having wrong perceptions about ODL because its benefits have not been documented. Most of the issues have been anecdotal yet focus should be on quality enhancement. Documentation will help counter these wrong perceptions.

The fifth question was: "What is needed for effective teacher education through distance education looking to the future?"

The twenty case studies examined in the present study provide us with a significant body of data to further our understanding about the use of distance teacher education for both initial and continuing training. Although the case studies are limited in their scope, they make it possible to draw some recommendations about the appropriate uses of open and distance learning in the training of teachers. On the basis of the present findings, effective distance education programmes would require the adoption of the following key strategies:

- Winning government support for distance teacher education,
- Setting up a directorate for the coordination of distance teacher education,
- Adoption of the partnership model in the training of teachers

Role of the State in distance teacher education

Just like any other teacher education programme, distance teacher education must be supported by government. Education in Zimbabwe enjoys a worldwide reputation for its high quality. This is achieved through a national system of regulation and quality assurance. The Ministry of Education, Sport and Culture is responsible for legislation pertaining to education. In this section we discuss the role of the state in distance teacher education in Zimbabwe. In Zimbabwe the government trains, hires and pays teachers. The key power held by the state over education is that of allocating the rights to supply credentials. To give degrees, an educational institution must be licensed by a body authorized by the state. This power of the state also applies to private educational bodies, and thus provides a strong unifying force on educational institutions. The case studies examined in the present study show that in most countries, distance education for teachers receives funds from all four of the most usual sources of funds for education; from government budgets, from student fees, from the private and NGO sector and from funding agencies. Several programmes receive funding from a combination of sources, for example, the distance teacher programmes in both China and Nigeria are funded partly by government and partly by student fees. All teacher education programmes at UNISA are state funded through grants. In Nigeria the National Teachers Institute is funded directly by the Federal Ministry of Education. A distance education programme for the professional development of head teachers in Burkina Faso is funded within the framework of a bilateral aid agreement between the government of Burkina Faso and France. The UK Open University received a grant of about US\$3.5 million to develop an ICT based initial teacher education programme through distance education. In Zimbabwe the ZINTEC programme was funded by the government of Zimbabwe with the material support from UNESCO (Chivore, 1989). At the ZOU, in-service teacher programmes eg. the Bachelor of education and Master of Education (Educational management) are fully supported by government. However there are challenges in the recognition of initial teacher training programmes such as the Diploma in Education for primary school teachers.

Our discussion in this article is based on the premise that the government has a social contract to provide education to all its citizens, just as it is its obligation to provide security to all its citizens. Similarly, education is the responsibility of the government for the social security of its citizens. Distance teacher education, therefore, needs government support.

Organization and Management of Distance Teacher Education Programmes

Distance teacher education programmes need to be well organized and managed. There is a need to set up a teacher education directorate responsible for coordinating distance teacher education. The directorate should be responsible amongst other things for:

- Integrating and rationalizing teacher education systems with the aim of providing standardized, accredited training for pre-service and in-service training.
- Implementing flexible open and distance learning methods, designing new roles and responsibilities for existing providers and transferring training and support tasks to the level of district, zone and school.
- Conducting feasibility studies, audits and baseline studies to determine what institutions and expertise already exist and could be pulled into a delivery and support system.
- Developing the delivery and support network that links all those involved with one another.
- Provision of student support as the key element for success.
- Enlisting commitment from all stakeholders.
- Quality assurance and quality control of all national teacher programmes.
- Student teacher administration such as deploying students into schools, paying their allowances and looking after their welfare.

Adoption of the Partnership Model in the Training of Teachers

Distance teacher education is best implemented using school based training in the context of partnership. The partnership model involves the third model that is the equal partnership model involving the training

institution, the school and the government, with the training institution teaching theory, the school facilitating teaching practice and the government providing funding.

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REFERENCES

- Aderinoye R., and Ojokheta K. (2004) Open-distance education as a Mechanism for Sustainable Development: Reflections on the Nigerian Experience. *International Review of Research in Open and distance Learning* 5(1).
- Allsop, T. (2008). "Can Open and Distance Learning help make South Asia competitive?" in *Education Research Journal*, DFID, UK.
- Booth, M. B., Furlong and V. J. and Wilkin M. (1990) *Partnership in Initial Teacher Training*. Cassell Educational Limited. London.
- Chakwera, E. and Saiti, F. (2005). *Training Teachers Through The Distance Mode: The Experience Of Domasi College of Education In Malawi*. Domasi College of Education. Malawi

Chivore B.R.S., (1992). Pre-service Education at a Distance. In *Distance Education in Anglophone Africa: Experience with Secondary Education and Teacher Training*. Washington DC World Bank.

Dellana, S., Collins, W. & West, D. (2000). Online education in a management science course-effectiveness and performance factors. *Journal of Education for Business*, 76,43-48.

DeSantis, C. (2002). Elearners.com. Retrieved November 2, 2002, <http://elearners.com>

Dillon, C. L., Gunawardena, C. N., & Parker, R. (1992). Learner support: The critical link in distance education. *Distance Education*, 13(1), 29-45.

Duschl, R. A. & Waxman, H. C. (1991). Influencing the learning environment of student teaching. In B. J. Fraser & H. J. Walberg (Eds.), *Educational environments: Evaluation, antecedents and consequences* (pp. 255-270). London: Pergamon. Educational Technology Publications.

Gatawa, B. S. M., (1986). *The Quality Quantity Dilema*. College Press, Harare.

Holmes, D. R., Karmacharya, D. M. & Mayo, J. K. (1993). Radio education in Nepal. In H. Perraton (Ed.), *Distance education for teacher training* (pp. 136-195). New York: Routledge.

Kangai, C. V., Bukaliya, R., Musika, F. and Mapuranga, B. (2011) Content Analysis of Research Projects submitted by Undergraduate Students (2000-2009) at the Zimbabwe Open University: Implications for Quality Assessment (2010). *Turkish Online Journal of Distance Education-TOJDE* January 2011 ISSN 1302-6488 Volume: 12 Number: 1 Article 2

Keegan, D. (1990). *The Foundation of Distance Education*, London: Croom Helm.

Keegan, D. (1996). *Foundations of Distance Education* (3rd Ed). London: Routledge.

Makau, B. (1993). The external degree programme at the University of Nairobi. In H. Perraton (Ed.), *Distance education for teacher training* (pp. 316 - 348). New York: Routledge.

Mertens, D. M. (2005). *Research and Evaluation in Education and Psychology: Integrative diversity with quantitative, qualitative and mixed methods. 2nd Edition* London. Sage Publications.

Moon, B. (2006) *Research Analysis: A Global Overview of Current Policies and Programmes for teachers and teacher education*-Prepared for the joint ILO/ UNESCO Committee of experts concerning teaching personnel. Milton Keynes OUUK.

Morrison, L. & Pitfield, M. 2006. Flexibility in initial teacher education: implications for pedagogy and practice. *Journal of Education for Teaching* , 32(2), May 2006, 185-196.

Myrdal, S. (1994). *Teacher Education on Line: What gets lost in Electronic Communication?* Educational Management: Issues and Practice.

New Economic Plan for African Development (NEPAD). C.2006. *Teacher training and teacher development through open and distance learning in Africa, Chapter 1 of a Draft Report* . Pretoria: NEPAD.

Oliveira, J. & Orivel, F. (1993). Logos II in Brazil. In H. Perraton (Ed.), *Distance Education for teacher training* (pp. 69-94). New York: Routledge.

Organisation for Economic Cooperation and Development (OECD) (2001). *Education Policy Analysis 2001*. Centre for Education Research and Innovation. Paris: OECD

Peat, J., and Helland, K.(2002).Perceptions of Distance Learning and the Effects on Selection Decisions. Retrieved from: <http://bus.utk.edu/iopsyc/pdf/Perceptions-of-Distance-Education-siop2003.pdf>

Perraton, H. (1988). A theory for distance education. In D. Sewart, D. Keegan, & B. Holmberg (Ed.), *Distance education: International perspective* (pp.34-35) New York: Routledge.

Perraton, H. (1993). The effects. In H. Perraton (Ed.), *Distance education for teacher. training* (pp. 391-401). New York: Routledge.

Phipps, R. & Merisotis, J. (1999). What's the Difference? A review of Contemporary Research on the Effectiveness of Distance Education in Higher Education. The institute for Higher Education policy.

Prescott, W. & Robinson, B. (1993). Teacher education at the Open University. In H. Perraton (Ed.), *Distance education for teacher training* (pp. 287-315). New York: Routledge.

Robinson, B. & Latchem, C. Eds. 2003. *Teacher Education Through Open and Distance Learning. World review of distance education and open learning Volume 3* . London/New York:Routledge Falmer/COL. 91-111.

Robinson, B. (1997) 'Distance education for primary teacher training in developing countries' in J. Lynch, C. Modgil and S. Modgil (ed.) (1998). *Education and Development: Tradition and Innovation Volume 3 Innovations in Delivering Primary Education* . London: Cassell Educational Press UNESCO,

Russell, T. L. (1999). The no significant difference phenomenon. Raleigh, NC: North Carolina State University.

Saide, J. G. and Saide T. M. (2008). Teacher Education through Distance education-Rising to the Challenge Retrieved from: <http://www.nou.edu.ng/noun/acde2008/>

SAIDE. (1994). *Open learning and distance education in South Africa*. (Report on an International Commission. SAIDE - South African Institute for Distance Education on behalf of the African National Congress). Manzini: Macmillan Boleswa.

Siaciwena R. (2011). Open and Distance Learning in the Southern Africa Development community (SADC). A paper presented at the Regional Open and Distance Learning Awareness workshop held in Johannesburg South Africa.

UNESCO, (2000). The Dakar Framework for Action. Education for All: Meeting our Collective Commitments. Paris: UNESCO.

UNESCO. Jean-Francois T. (2004). *Distance Education for Primary Teacher Training - Case Studies of Student Support Systems from sub-Saharan Africa. Report for the Department of International Development: Contract Number ED2002/01*. Cambridge: International Research Foundation for Open Learning (IRFOL).

UNESCO. Mattson, E. (2004). *Distance Education for Primary Teacher Training - Case Studies of Student Support Systems from sub-Saharan Africa. Report for the Department of International Development: Contract Number ED2002/01*. Cambridge: International Research Foundation for Open Learning (IRFOL).

Verduin, J. & Clark, T. (1991). Distance education: The foundations of effective practice.

Willis, B. (Ed.) (1994). Distance education strategies and tools. Englewood Cliffs, New Jersey.

Wragg, E.C. (1984) Teaching Teaching. Newton Abbot: David and Charles. London Macmillan.

Zimbabwe Government (2010). Ministry of Education, Sport, Arts and Culture Interim Strategic Plan July 2010 – December 2011). Harare, Government Printers.

Zvobgo R.J. (1986), Transforming Education-The Zimbabwean Experience. Harare College Press.

Appendix 1: Case Studies on Distance Teacher Education

ARTICLE	AUTHOR : JOURNAL AND YEAR
1.Training Teachers Through The Distance Mode: The Experience Of Domasi College of Education in Malawi	Elias Chakwera & Francis Saiti (2005) http://www.col.org/pcf2/papers/chakwera.pdf
2.Managing the Field Experience in Distance Delivered Distance Education Programmes	MARY SIMPSON Massey University New Zealand (2006) http://www.col.org/pcf2/papers%5Csimpson.pdf
3.Field Experience in Distance Delivered Initial Teacher Education Programmes	MARY SIMPSON Massey University New Zealand Journal of Technology and Teacher Education 2006
4.Distance Education for Technology Teachers: Case Studies of Botswana, Seychelles and Mauritius.	Williams P. J.Journal of technology Studies
5.Assessing Student Teachers Performance in Practicum	Haigh M. And Tuck B. http://www.aare.edu.au/99pap/tuc99118.htm
6.Teacher Education through Distance education – Rising to the Challenge	Saide J. G. And Saide T.M. http://www.nou.edu.ng/noun/acde2008/acde_en/speakers.pdf
7.Pre- service Education at a Distance: The Case of Zimbabwe	Chivore B.R.S. (1992) Distance Education in Anglophone Africa: Experience with Secondary Education and Teacher Training
8.Flexible Models for Primary Teacher Training in Africa	Mattson E. http://www.dfid.uk/pubs/files/field-based-models-teacher-training-63.pdf
9.Teacher Education Through Distance Learning: Technology, Curriculum, Cost, Evaluation, Summary of Case Studies.	Perraton H., Robinson B. and Creed C. The International Research Foundation for Open Learning UNESCO
10.Brazil: <i>Television –Plus: Journalism in the Service of Teacher Development.</i>	Oliveira Joao Batista The International Research Foundation for Open Learning UNESCO
11.Burkina Faso: <i>Professional Development of Head Teachers in Burkina Faso</i>	Terret Jean- Francois The International Research Foundation for Open Learning UNESCO

12. <i>China: Reaching Teachers Through Television</i>	Zhang Wei Yuan and Jian Niu The International Research Foundation for Open Learning UNESCO
13. <i>Chile: Teachers Learning to Use Information Technology</i>	Cerda Cristian, Leon Miriam, and Ropoll Miguel The International Research Foundation for Open Learning UNESCO
14. <i>India: Developing Primary Teachers Knowledge and Skills in Child Guidance</i>	Mehrotra Ram Narain The International Research Foundation for Open Learning UNESCO
15. <i>Mongolia: Reorienting Primary Teachers to New Teaching Approaches</i>	Robinson Bernaddette. The International Research Foundation for Open Learning UNESCO
16. <i>Nigeria: An Alternative Route to Primary Teacher Qualification</i>	Ederinoye Rashid The International Research Foundation for Open Learning UNESCO
17. <i>South Africa: Interactive Radio For Supporting Teachers of English as a Second Language, OLSET</i>	Potter Charles The International Research Foundation for Open Learning UNESCO
18. <i>South Africa: New Route to Teacher Education Degrees</i>	Potter Charles The International Research Foundation for Open Learning UNESCO
19. <i>United Kingdom: Using ICT to Support School Based initial Teacher education</i>	Walker Rob The International Research Foundation for Open Learning UNESCO
20. <i>In-service Primary Teacher Training Through Distance Education in Madhya Pradesh</i>	Sahoo P.K. and Khan M. Indian Journal of Open Learning (1998) Vol 7 (2) ISSN 0971- 2690.