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Open Distance Learning: An Alternative Strategy for Rural Teachers' Professional Development in Lagos State, Nigeria

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Abstract

Advancement in technology and changes in knowledge delivery are making it imperative for teachers to acquire new skills and knowledge to meet the needs of today's students. Teachers in rural areas rarely take advantage of professional development opportunities provided for them. This study explored the perspective of rural teachers on the constraints of accessing professional development programmes in order to situate Open Distance Learning (ODL) as an alternative method of delivering professional development training. Rubenson's Recruitment Paradigm (1977), Cross' Chain-of- Response Model (1981) and Darkenwald and Merriam's Psychosocial Interaction Model (1982) guided the study. The study employed survey research design to answer the research questions raised. The population consisted of all teachers in public secondary schools in the rural areas of Lagos state. Ten secondary schools were randomly selected for the study. Twenty teachers were purposively selected from each school, making a total of 200 teachers. A self-developed questionnaire was employed to collect data. Data collected were analysed using descriptive statistics. The study revealed that teachers in the rural areas rarely go for professional development programmes as a result of constraints such as lack of time, lack of funds, inability to forego family time for development training and teachers' disposition. Based on the findings, it was suggested that the effects of these barriers can only be mitigated through ODL which allows teachers to learn whatever, wherever, whenever, and however they want to learn through information communication technology.

Keywords: ODL, Alternative, Strategy, Rural, Teachers, Professional, Development



Introduction

The educational system is grappling with the problem of an ever-increasing population of learners both at the primary and secondary levels as well as with a high number of out of school children. There is also the problem of the high number of untrained and undertrained teachers as well as low number of qualified teachers, which experts have attributed to the problem of unemployment which is taking unqualified graduates into the teaching profession as a way out. The rural areas seem to be worst affected by all the problems mentioned above. Rural areas in Nigeria are associated with unique contextual challenges, which include lack of social amenities and low level of infrastructural development which makes it difficult for them to attract and recruit competent and qualified teachers (Haruna & Liman, 2015). This is in addition to other deficiencies such as geographical isolation and poor socio-economic conditions. These situations contribute to making teaching in rural schools inferior and undesirable by many qualified teachers (Pennefather, 2011). For instance, in Lagos state, the perennial and gross lack of social amenities prevalent in rural communities has affected the quality and quantity of teachers available in most schools.

This critical situation of teachers in the rural areas calls for constant training and retraining of teachers through professional development training programmes (International Labour Organization, (ILO), 2016). The assumption is that exposure to such training will not only help them to acquire requisite teaching qualifications but will also enable them to update and upgrade initial qualifications they had as well as help them keep abreast with changes thrown in by technological advancement (UNESCO, 2015). In reaction to the perennial shortage of teachers with requisite qualifications in rural areas, in-service training in the form of professional development programmes are organized for teachers from time to time. Professional development programmes are organized for teachers to help them acquire new skills, knowledge, values, and to update and upgrade existing knowledge and skills in order to improve their output and serve the learners better. However, not all of them seem to take advantage of such training opportunities hence the goals of such professional development programme are not achieved. The reasons studies have shown include teachers' attitudes Adams (2013), teachers' characteristics and strategies of implementation (Zheng, Honbiao & Shenghua, 2019). It calls for a paradigm shift and an alternative way in which professional development programmes for teachers are provided in order to mitigate the effects of possible barriers, enhance the teachers' buy-in and uptake of such programmes as well as enhance their effectiveness and efficiency.

Theoretical Framework and Review of Related Literature

The theoretical framework adopted for this study is based on Rubenson's Recruitment Paradigm (1977), Cross Chain-of- Response Model (1981) and Darkenwald and Merriam's Psychosocial Interaction Model (1982). These theories posit that the tendency of adults to participate or not to participate in learning activities is determined by dispositional, institutional and environmental



factors. These factors include attitude towards professional development activities, self-efficacy, time, resources, school culture, family influence, principal and colleague influences.

Rubenson (1977) proposed a recruitment paradigm which sees the individual learner's participation behaviour as contingent upon both personal and environmental variables operating within the adult's life space. Personal variables include the individual's previous experience, personal attributes, developmental tasks confronting the individual during the life cycle. Environmental variables include the degree of hierarchical structure of the individual's life space which are environmental constraints deterring one's control of one's situation; others are the norms, values of significant others and institutional facilitators or impediments to continuing education.

Cross (1981), developed a composite Chain-of- Response Model, which explains adults' participation in learning activities. The model stipulates that adults' participation in learning activities is conceived not as a single isolated act but as a result of a complex chain of responses of the position of the individual on the environment. Darkenwald and Merriam (1986) proposed the Psychosocial Interaction Model, which postulates that participatory behaviour of adults is determined by a continuum of responses to both internal and external stimuli. According to the theory, adult participation behaviour is determined by the socio-economic status and adult socio-economic status is conceptually portrayed as the first and most dominant of the model's continuum.

These theories are relevant to this study because they identified possible factors that affect participation in professional development programmes among adults. Their assertions are in line with the findings of other scholars and help to strengthen the finding of this study that personal attributes, government and school-based problems hinder participation of teachers in rural areas in professional development programmes. The theories, therefore, brought to the fore the need to evolve an alternative system of educational delivery that will reduce the challenges of participation in professional development among teachers. This educational system according to this study is Open Distance Learning (ODL).

Open Distance Learning in the context of teachers' professional development is a kind of self-education which allows learners to learn independently and at their own pace irrespective of location, time or place. It is technology-based, flexible and makes access to learning easy for the learners. It has been recognized as an alternative strategy for providing continued professional development training for teachers. For instance, Pitsoe and Maila (2012), contended that ODL is a vital strategy for human capital development such as teachers' development and it is also a practical strategy to address the challenges of widening access thereby increasing participation in higher education. ODL helps teachers to assess course materials, learning instruction, data and other information via diverse media and methodologies.



Open and Distance Learning (ODL) has been defined by different scholars. For instance, Shohel and Power (2010), defined ODL as an educational process in which a significant proportion of learning takes place remotely and flexibly beyond the formal learning environment. Ghosh, Nath, Agarwal and Nath (2012) contend that ODL connotes open access to education and training that frees the learners from the constraints of time and place as well as offers them flexible learning opportunities. It is education without borders because it makes it possible for students to have access to education regardless of where they are, when they want, and how they want through the use of Information Communication Technology (ICT).

In the context of this study, "open" connotes that access to education and learning opportunities for teachers is easy and not restricted and that teachers are at liberty to study independently what, when, where and how they want through the use of telephone, video, internet and other electronic online materials. This can be done synchronously that is, learners are able to interact and receive feedback from their teachers and fellow student through instant messaging system or asynchronously which does not involve immediate feedback and instant messaging system but enables the learners to download and attend to their courses at their convenient time without leaving their homes or workplace.

The "Openness" of ODL does not imply that ODL is free because the technologies (internet, telephone, video, and others) used for ODL are not in any way cheap to acquire especially by teachers in the rural areas. However, through ODL other costs associated with the conventional method such as the sacrifice of leaving the family to attend professional development training away from home, cost of transportation, cost of accommodation and even feeding are completely eliminated because the learners are able to access the training from wherever they are. ODL is also useful for teachers especially those in the remote areas as it grants them unlimited access to learning opportunities, helps to study at the comfort of their homes thereby helping them to overcome geographical and other barriers to learning. In addition, it helps to take care of cultural, religious and political barriers that may hinder teachers, especially those in rural areas from taking advantage of professional development training.

Challenges of Professional Development Programmes

It has been established that teachers, especially those in the rural areas, rarely take advantage of available professional development programmes despite their importance in teacher' professional development and quality of output. While some scholars attribute it to the use of traditional formal method which does not allow teachers easy and flexible access to learning, involves moving to different geographical location as well as entail taking the teachers away from their families and jobs, others attribute it to the teachers' personal characteristics. For instance, Filges, Torgerson, Gascoine, Dietrichson Nielsen and Viiholt, (2019),contend that the suitability of methods and approaches employed for continuing professional development of teachers



determine teachers' perception and participation in the programme. Other factors that affect teachers' participation in professional development programmes include; personal characteristics such as attitude, time, self-efficacy, age, gender, appraisal of feasibility (Aydin, 2011; Collins, 2011; Pearsall, Hodson-Carlton & Flowers, 2012; Adams, 2013; Mascher, 2016; Zheng, et al., 2019). Others include work environment factors, i.e. management support and collegial support (Postholm, 2011; Higgins and Harreveld, 2013). Of these factors, personal factors are said to be more significant in affecting participation in professional development programmes among teachers.

According to Burns (2015), the barriers to professional development can be classified into four difficult working conditions for teachers, namely:

- lack of or irregular remuneration,
- lack of respect from school leaders and community members,
- · lack of teaching learning materials;
- systemic challenges poor leadership, limited administrative capacity, lack of incentives and encouragement conflicts; and poorly designed professional development programmes as a result of disconnect between policymakers and educational planners, policy makers misunderstanding teacher, what they do and how they should learn.

In a similar vein Omar, Rashid, Mohamad and Yusof (2017), observed that distance, job commitment and allocation of time, financial problems and family commitment tend to hinder teachers from participating in professional development programmes. In addition, Gomba (2019), posited that lack of interest by the teachers, lack of support by school management by not providing the teachers with requisite incentives and time for professional development, lack of understanding of the value of professional development and poor ICT skills among teachers all contribute to hinder teachers in the rural areas from taking advantage of professional development training.

Finally, Pitsoe and Maila (2012), posited that professional development training is not always accessible to teachers located in remote and rural areas where there are no higher education institutions.

Statement of the Problem

To be effective in a dynamic environment such as our own, teachers need to continually update and upgrade their knowledge, skills and abilities through professional development programmes. Studies have shown that professional development programmes are not readily available to many teachers and where it is available; teachers in remote places such as rural areas rarely participate. This situation is attributed to and exacerbated by contextual characteristics that make access to such programmes difficult and therefore calls for an alternative strategy that will minimize the



problems and make access to and utilization of opportunities for teachers' professional development programmes better for rural teachers. Although many studies have been done to identify barriers to teachers' participation in continuing professional development programmes, none seem to have been to investigate how ODL can be used to mitigate the barriers. This study was therefore conceived to determine major factors hindering teachers in the rural areas from participating in professional development programmes in order to suggest ways ODL can help to reduce or eradicate the problems.

Purpose of the Study

The study was carried out to explore ODL as an alternative to enhance access to professional development programmes for teachers in rural areas in Lagos state. Specifically, objectives of the study include:

- 1. To determine the professional development programmes available for teachers in rural areas:
- 2. To ascertain the extent to which rural teachers have access to teachers' development programmes;
- 3. To identify factors that hinder teachers from attending professional development training in rural areas; and
- 4. To determine how ODL can enhance the delivery of professional development for teachers.

Research Questions

The following questions were formulated to guide the study.

- 1. What are the professional development programmes available for schoolteachers in rural areas?
- 2. To what extent are professional development programmes accessible for rural teachers?
- 3. What are the factors affecting participation in professional development programmes among teachers in rural areas?
- 4. How can ODL enhance participation in professional development programmes among teachers in rural areas?

Methodology

This quantitative study employed a descriptive survey to answer the questions generated for this study. This design is appropriate because of its potential in investigating and establishing facts about the nature, distribution and interrelationships between educational, sociological and psychological variables within the population of the study. Again, it allows the researcher to study a segment of the population in-depth and generalize the finding from the sample to the larger



population. The population of the study consisted of all teachers in public secondary schools in Shomolu Local Government Area of Lagos State. A total of ten secondary schools were selected, and twenty teachers were purposively selected from each school, making a total of 200 teachers. To be selected for the study, the teacher should have spent a minimum of two years in the school. All the teachers in the selected schools who met this criterion were selected for the study. Participation in the study was voluntary. The respondents' consent was sort before involving them in the study. They were intimated of the study and were assured that their response will be used only for the purpose of the research and that the research will not expose them to any kind of danger and their response will be confidential.

Data for the study was collected using a researcher-developed structured questionnaire. The questionnaire consisted of two sections. While the first section elicited information on the biodata of the respondents, the second section consisted of items that answered the research questions. The research instrument was also validated by experts in test and measurement in the faculty of education, University of Lagos. The instrument was found to be reliable with a correlation coefficient value of 0.72. Data collected were analysed using percentages, mean, and standard deviation. In analysing the data, only valid responses (not the sample size) were used in the analysis.

Limitation of the Study

One limitation of this study was that data was collected from a Local Government which is not completely rural. However, the profile of a good number of public schools in this LGA in terms of learning environment, infrastructure and quality of teachers may not be significantly different from what we have in rural areas in the state.

Results

Table 1: Demographic characteristics of respondents

S-N	Variables	Frequency	Percentages (%)
1	Gender	-	-
	Male	87	43.5
	Female	113	56.5
	Total	200	100
2	Marital status		
	Single	85	42.5
	Married	105	52.5
	Divorced	6	3.0
	Widowed	4	2.0
	Total	200	100
3	Qualification		
	NCE	55	27.5
	B.Sc., B.ED	110	55.0
	Masters	35	17.5
	Total	200	100
4	Experience		
	Less than 5 years	66	33.0
	5-10 years	62	31.0
	9-14 Years	37	18.5
	15 years and more	35	17.5
	Total	200	100.0

Table 1 shows the demographic statistics of the respondents used in the study. From the table, 113 (56.5%) of the respondents were female teachers, while the remaining 87 (43.5%) were male teachers. The table further shows that 85 (42.5%) of the teachers were still single, 105 (52.5%) were married while only 6 (3%) and 4 (2%) were divorced and widowed, respectively. With regards to the educational qualification, the result from Table 1 indicates that respondents with NCE constitute 55 (27.5%) while teachers with first degree and its equivalent, as well as Master's degree certificates, constitute 110 (55%) and 35 (17.5%), respectively. Information from the table also shows that 66 (33%) of the respondent had only worked in their respective schools for less than 5 year, 62 (31%) for 5-10 years while those with 9-14 years of experience as well as 15+ years of experience are 37 (18.5%) and 35 (17.5%) respondents, respectively.

Research Questions 1: What are the professional development programmes available for schoolteachers in rural areas?

Table 2 Availability of professional development training for teachers in rural areas based on availability and unavailability

Profession Dev. Training Strategies	Participation		Available (Responses)		Not Available (Responses)		
	N	%	N	%	N	%	Rank (Ava)
In-service Training	83	41.5	31	15.5	52	26.0	1 st
Seminar	69	34.5	17	8.5	52	26.0	2 nd
Workshop	33	16.5	8	4.0	25	12.5	3 rd
Conference	8	4.0	4	2.0	4	2.0	4 th
Others (further Study via (ODL)	7	3.5	2	1.0	5	2.5	5 th
Total	200	100	62	31.0	138	69.0	



Table 2 shows the responses of the respondents (teachers) on available strategies utilized for professional development training for teachers in rural areas. The result was computed based on valid responses of each response categories: Available (62) and not Available (138). The ranking was also done based on the availability of each strategy. It is evident from the table that 31(15.5%) of the respondents indicated in-service training as the professional development strategy is available to them, while 52 (26%) felt otherwise. In a similar pattern, 17 (8.5%) of participants agreed that seminars were available in their school. 52 (26%) of the respondents indicated that seminars were not available to them. For workshops, eight (4%) while 25 (121%) said that it is not available in their school. The table also shows that of the eight teachers who have participated in conferences, four each indicated availability and non-availability, respectively. The responses of the respondents were further ranked to identify the strategy perceived by the respondents as the most available to them. Evidence from the table shows the most rated strategy by the teachers is in-service training. This is followed by seminars. Others include workshop, conferences and paid study. However, ODL ranked lowest and the least utilized strategy used. The reason for this could be ignorance of the benefits inherent in ODL as an educational delivery system.

Research Question 2: To what extent are professional development programmes accessible for rural teachers?

This research was measured using ability to have attended or not attended any of the five professional development programmes listed.

Table 3: Access to professional development training programmes among teachers in rural areas

	Attended	Not Attended	
	Frequency	Frequency	
	(%)	(%)	Total
In-service	58	142	200
	(29%)	(71%)	(100%)
Seminar	48	152	200
	(24%)	(76%)	(100%)
Workshop	26	174	33
	(13,5%)	(86.5%)	(16.5%)
Conferences	46	154	200
	(23%)	(77%)	(100%)
Others	22	178	200
	(11%)	(89%)	(100%)
Weighted %	40 (24.0%)	160(76.0%)	200 (100.0%)



Table 3 shows the extent of or participation by rural teachers in various professional development programmes available to them. As can be seen from the table, 58 (29%) admitted to have attended in-service training while 142 (71%) said they have not attended in-service training. Similarly, only 48 (24%) of the participants agreed that they have attended seminars, organized by their schools as form of professional development while 152(76%) reported otherwise. As regards to workshops, only 26 (13.5%) of the participants admitted that they have attended workshop in their respective schools leaving a large proportion 17 (86.5%) of the participants who think otherwise. Furthermore, only 46 (23%) of the 200 participants agreed that they have attended conferences organized by their respective employers while a higher proportion of the participants reported otherwise. In summary, 48 (24.0%) of the respondents agreed to have attended professional development programmes while majority 152 (76.0%) appeared to have not. This, therefore, shows that the majority of the participants have never attended any continuing development programme. This is despite the fact that there may be occasional opportunities for in-service training for them. This result, therefore, establishes the fact that even when training opportunities are provided for the teachers, most of them may not participate if the conditions are not convenient for them.

Research Question3: What are the factors affecting participation in professional development programmes among teachers in rural areas?

To answer this question, the Likert scale was used to compute the rated mean. The means for each item is calculate using n = Fx+Fy/N where N = Total population. Fx= No of responses x Scale value (2x agree), Fy (1X disagree) For instance= n = 73(2) + 127(1)/200 = 1.36



Table 4: Challenges of teachers' professional development in rural Nigeria (N=200)

	S/N	Item	Disagree (Response	Agree (Respon	Mean	Std. Dev.	Rank
			s)	se)		Dev.	
_	1	Low budgetary allocation (funding) for	127	73	1.36	.482	
þ		training by government					
ate	2	Poor selection process	147	53	1.27	.442	
t re les	3	Poor awareness/opportunities	138	62	1.31	.463	
nen tac	4	Absence of study leave	144	56	1.28	.450	
rnment re obstacles	5	Lack of clear government policy on	148	52	1.26	.439	
Government related obstacles		professional development					
Ö		Grand Mean			1.29	.455	3 rd
70	1	Time constraints	109	91	1.45	.499	
ate.	2	Long distances involved	145	55	1.28	.447	
acher-rela obstacles	3	Financial constraints	90	110	1.55	.498	
er- sta	4	Family considerations	118	82	1.41	.493	
Teacher-related obstacles	5	Poor teacher readiness	123	77	1.35	.479	
Ĕ		Grand Mean			1.41	.483	1 st
	4	Deer feeilities in eeleele	400	7.4	4.07	404	
<u>o</u>	1	Poor facilities in schools	126	74	1.37	.494	
School based obstacle	2	Inadequate personnel to hand over their responsibility	129	71	1.36	.479	
qo p	3	Poor incentives for professional	138	62	1.32	.471	
1Se		development					
eq	4	Poor access to professional training	116	84	1.42	.494	
00	5	Poor capacity of school administrator	134	66	1.31	.463	
Sch		Grand Mean			1.36	.480	2 nd
0,							

NB: Likert scale Disagree (1), Agree (2)



Table 4 shows the various challenges and factors hindering rural teachers' from taking advantage of available professional development training, as reported by the respondents. In computing the mean values, only valid responses were utilized. Evidence from the table indicates that the factors responsible for poor teachers' participation in professional development in rural areas are multifaceted. The factors were grouped into three, covering government-related factors; teacher-related factors and school-based factors. With regards to government-related factors, low budgetary allocation (funding) (M=1.36, S.D = .482) topped the group. Other factors in that group include; Poor awareness/opportunities of professional development options, (M=1.31, S.D=.463), absence of long-term leave for teachers aspiring to upgrade their qualifications (M=1.28, S.D= .450), poor selection process that favours teachers in the city at the expense of those in rural areas (M=1.27, S.D=.442), and finally lack of clear and consistent government policy on teachers professional development (M=1.26, S.D=.439).

With regards to teacher-related factors or obstacles, evidence from the table indicates that financial challenges top the list (M=1.45, S.D = .499). Other teacher-related factors as identified by respondents include; time constraints, (M=1.45, S.D=.499), family considerations such as child care (M=1.41, S.D=.493), rural teachers' poor readiness for professional development (M=1.35, S.D=.479) as well as long-distance with regards to the venue of professional development programmes. As regards to school-related factors, access to professional development programme (M=1.494, S.D=.494) ranked highest. Others are poor facilities in schools (M=1.37, SD=.494), inadequate personnel to handle their responsibility for the period of such professional development (M=1.36, SD=.479), poor incentives for professional development (M=1.32, SD=.471) and poor capacity of school administrator (M=1.31, SD=.463).

The three groups were further ranked to determine the group with the most effect. Evidence from the table indicates that teacher-related obstacle ranked first. Personal disposition such as attitude, poor readiness for professional development as well as excuses of not having adequate time, play key roles in preventing the teachers from seeking and participating in professional development programmes. Next to teachers' related obstacle is the school-based obstacle, the inability of the school administrator to commit to the professional development of their teachers by providing necessary incentives for teacher has contributed immensely to teachers' low interest in professional development. Interestingly, government-related obstacle ranked the least among the challenges.

Discussion of findings

The study was conducted with a view to establishing ODL as an alternative strategy for effective continuing professional development of rural teachers in Lagos state. To achieve this goal, the study leveraged on three theories which identified factors that impede adults from participating in professional development programmes and this helps in formulating the research questions for



this study as well as justifies the need for an alternative mode of delivery that eliminates the barriers identified by the theories. Professional development programmes available to teachers in the rural areas were, determined, and the level of participation and factors that impede participation by rural teachers ascertained. Findings from the study show that a number of professional development programmes are available for teachers in rural areas with in-service training ranking first. This is followed by seminars, workshop, conferences and paid study. Although the respondents indicated that these programmes are available in some cases, most of them were of the view that the programmes are not significant across schools in rural areas. This means that even where professional development programmes exist, access will still be limited for the majority of the teachers in rural areas. In line with this assertion, Buckler and Gafar (2013) posit that even when teachers are keen on embarking on their professional development, they are often confronted with lack of opportunities for professional development and other obstacles and hindrances.

This result raises questions such as why is accessibility low? Are there impinging factors or are there professional development programmes that appeal more to rural teachers? Some of these questions were not covered in this study hence the need to carry out further research on the type and nature of professional development programmes that will appeal more to the rural teachers.

With regards to factors that affect access to professional development programmes, the study revealed an array of challenges that face rural teachers in their bid to participate in professional development training. They were grouped into three, namely government-based factors, teacher-related factors and school-based factor. These factors were further ranked to determine their level of impact as perceived by the teachers and interestingly teacher-related which has items such as financial constraints, poor teacher readiness, family consideration, lack of time and others teacher characteristics ranked first. All these can be regarded as teachers' characteristics or disposition. However, the study did not set out to assess the attitude of rural teachers towards teachers' professional development programmes. It is therefore recommended that a detailed investigation into the impact of rural teachers' attitude towards professional development programmes be conducted using the same respondents if possible.

The result of this study is consistent with several studies that reported a high influence of teacher characteristics on participation and outcome of professional development programmes (Aydin, 2011, Collins, 2011; Pearsall, et al., 2012; Adams, 2013; Mascher, 2016; Zheng, et al., 2019). The importance of the teachers' disposition in adult learning, such as in-service training cannot be overemphasized. This is mainly because adults are self-directed learners and are only motivated to learn when they are free to choose what to learn and how to learn; when they see learning as meeting their immediate needs, when they believe they have the time and resources for learning and when they can apply what they have learnt to solve their immediate problems.



This is why ODL is being recommended as a suitable alternative to help rural teachers deal with the challenges of the conventional face-to-face strategy. In line with this, Ghosh, Nath, Agarwal and Nath (2012), contend that ODL makes for open access to education, frees learners from the constraints of time and place and offers them flexible opportunity for learning. This means it enables the learners to learn what, where, when and how they want. It also allows them to study and work at the same time as well as gives them the freedom to learn at their own pace. ODL is also flexible in terms of how the courses are structured, the place, medium and time of delivery. It is technology-based and therefore removes learners' time constraints because it allows them to study according to their schedules.

Learning through ODL can be synchronous, which allows learners to ask questions and receive immediate response or feedback through instant messaging system, or asynchronous which allows learning to be done online or off-line and allows course materials to be delivered via the web, email and message boards where students can downloads or post in the online fora. Through the Learning Management System (LMS), information is delivered to the learners, thereby making it convenient for them to access learning materials, interact with a facilitator in different geographical locations. For instance, if teachers are away to work or for any outside assignment, through the LMS, they can access, get and exchange information using their telephones. ODL is a kind of self-education, and it is learner-centred and offers the learner some level of autonomy. Through ODL, learners have access to learning resources and knowledge and links where they can upload files and documents that are relevant to their study.

However, "open" in ODL does not in any way imply that ODL is free. Rather it means that ODL allows teachers a high level of autonomy and flexibility in terms of course content, the way the course is structured, the place, medium and time of delivery. That is, it allows the teachers to access learning from wherever they are, whenever they want and however they want. The teachers do not have to travel from their stations to attend professional development programme elsewhere, they will not abandon their families, pay for transportation or for accommodation to study outside their homes because they can study from their homes or offices through the use of ICT.

With regards to who pays for the cost of ODL if it is not free, the assumption is that almost every teacher in the rural areas has or can afford to have a telephone, a computer, radio or television through which ODL course materials can be accessed. It is also believed that teachers who engage in further studies do so because they know the value of acquiring additional skills and knowledge and therefore should be able to pay to access training through ODL because everything of value has a cost. But where they are not able to do so they can seek help from the school management or the school management can motivate and encourage them by helping them to acquire and pay for the technologies they need and any other cost they may incur. The management can also advance some soft loans to the teachers to help them with the payment



for their programmes as incentives to participate in the programmes. Finally, the issue of who pays for the cost of ODL is not covered in this study. It is therefore recommended that further research should be done to cover this area.

Integration of ODL in teachers' professional development has some implications for the teachers, the school management and the government in general if it is to achieve the purpose. For instance, some teachers may have poor ICT knowledge, some may lack knowledge or experience in online learning environment, others may simply be technophobic, and others may not have the resources to acquire the necessary ICT gadgets. The implication is that the teachers need orientation on the usefulness of ICT in their development training, they need to acquire ICT knowledge and those who already have the knowledge should constantly update and upgrade their knowledge of these technologies in order to effectively apply it both in their own study and in delivering their lessons when necessary.

Furthermore, the study found out that school-based obstacles such as poor facilities in school, low incentives for professional development, access to professional development, lack of or inadequate personnel to hand over their responsibilities to, poor capacity of school administrators affect teachers' participation in professional development. This finding is consistent with Gomba, (2019), who reported lack of support from school management and their inability to provide the teachers with requisite incentives to attend professional development as major challenges to participation in professional development among teachers. Furthermore, UNESCO, (2014), identified lack of finances and teaching resources, lack of or unstable electricity supply, difficult working condition for teachers, a dearth of accommodation and low remuneration as difficult circumstances in the schools that affect teachers' participation in professional development.

This implies that school management should provide the necessary incentives and motivation for the teachers to participate in professional development training. The school management should provide opportunities for ICT literacy programmes for the teachers and encourage them to attend through cash incentives, paid study leave or provision of loan facility to purchase ICT materials for their study. Efforts should be made to reduce the workloads as well as remove difficult working conditions that may hinder rural teachers from attending professional development programmes.

Government related obstacle ranked last among the challenges indicated by the respondents as impinging on their ability to participate in professional development programmes. These factors include poor funding, lack of awareness and opportunities and lack of opportunities to proceed for leave of absence, among others. This result is not surprising because over the years, budgetary allocation to education has been dwindling and the rural areas are worst affected resulting not only in low quality of education but also low opportunities for teachers to update and upgrade themselves through professional development programmes. This has brought to the fore the need for government not just to increase funding on education but also to create opportunities



and enabling learning environment for teachers, especially teachers in the rural areas for their continuous development. Professional development of teachers through ODL should be encouraged and the cost subsidized to motivate teachers to participate. There is a need to increase the budget for education of rural teachers, some of which should be used to purchase and upgrade ICT materials.

Conclusion

Teachers are undoubtedly the most crucial component of a schooling system, and the quality of education in any society is a function of the quality of its teachers. To be effective teachers need to update and upgrade their skills and knowledge continuously. This study has identified an array of challenges hindering rural teachers from participating in professional development programmes. These challenges require a paradigm shift in the way and manner professional development is delivered to be accessible to teachers. Educators in rural areas that are not only isolated but also grappling with a plethora of challenges that have made it almost impossible for them to take advantage of professional development programmes when and where they are available. Therefore, ODL which allows teachers in rural areas to participate in professional development programmes regardless of their location, qualification, pace and even age through the use of ICT such as telephone, the mass media and other web-related material is no doubt the best alternative to alleviate the effects of space, time and distance barriers.

Finally, there is no doubt that teachers, especially those in the rural areas may be confronted with a myriad of challenges which include limited internet access, unstable power supply and inadequate funds to buy data for teachers that have telephones. It is recommended that teachers who express interest in ODL be assisted by relevant stakeholders in education such as Nongovernmental Organisations (NGOs), Parent Teachers Fora, Cooperatives and school Management to acquire phones, data and even scholarships for deserving participants.

Recommendations

Based on the findings of the study, the following recommendations were made:

Equal and enhanced access of professional development programmes for teachers in the urban and rural areas should be ensured through ODL.

There should be continuous ICT literacy training for rural teachers to equip them with the necessary skills and knowledge that will enable them to take advantage of ODL and other online learning opportunities.



Improved budget allocation for professional training for all teachers in rural areas, to enable rural schools to purchase the right technology and other facilities to improve technology-enhanced online learning among teachers in rural areas.

School leaders should provide rural teachers with incentives that will motivate them to participate in continuing development programmes. This could be in terms of purchasing smart phones for them at a subsided price, providing stipends for them to buy data or even providing free data for them when necessary.

The school could help the teachers acquire needed ICT materials for development programmes at a subsidised rate or pay fully for them to attend such programmes. Attendance of professional development programmes could be made to be part of teachers' assessment for promotion. Policymakers at educational districts across the nation should carry a comprehensive assessment of rural teachers training needs and partner with ODL institutions to make programmes accessible to schools in rural areas.

To address the issues of poor internet connectivity and incessant power outage, the government should scale up rural electricity programme to ensure regular power supply in the rural areas as well as encourage more internet providers to locate their businesses in rural areas thereby making access to data easier.

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