

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

---

March 2023

## The Suitability of Hybrid Library Services to Open and Distance Learners in Nigeria

Ukoha O. Igwe

National Open University of Nigeria, ukohaigwe@yahoo.co.uk

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Scholarly Communication Commons](#)

---

Igwe, Ukoha O., "The Suitability of Hybrid Library Services to Open and Distance Learners in Nigeria" (2023). *Library Philosophy and Practice (e-journal)*. 7547.

<https://digitalcommons.unl.edu/libphilprac/7547>

## **The Suitability of Hybrid Library Services to Open and Distance Learners in Nigeria**

Ukoha O. Igwe

Associate Professor, Department of Library & Information Science

National Open University of Nigeria, 91 Cadastral Zone

Jabi, Abuja, Nigeria.

[uigwe@nou.edu.ng](mailto:uigwe@nou.edu.ng)

### **Abstract**

In Nigeria, open and distance learning has become widely accepted. Even though there are a myriad of educational problems, workers, politicians, school leavers, and the public are finding the distance learning system a convenient and flexible mode to acquire education. Libraries are indispensable in every facet of higher education. Adequate library support for distance learners is mandatory for the qualitative delivery of instruction and learning. The development of hybrid libraries has definite benefits for distance learners. It is imperative to create virtual learning environments and libraries without borders to reach multitudes of learners at various locations.

Several institutions are approved to run distance learning. Eight distance-learning university libraries were purposively selected to examine the status of hybrid library services aimed at reaching distance learners. These include the Federal University of Technology Library, Minna, University of Maiduguri Library, University of Abuja Library, Ahmadu Bello University Library Zaria, National Open University of Nigeria Library, Olabisi Onabanjo University Library, Ago-Iwoye, Ignatius Ajuru University of Education Library, Port Harcourt and Joseph Ayo Babalola University Library. The objectives of the study were to determine the status of library services in ODL institutions in Nigeria, analyse the form of library service most suitable to distant learners in Nigeria, examine the challenges confronting distance learning in Nigeria and determine the challenges in providing timely library services to distant learners in Nigeria.

This paper examines the penetration of distance learning in Nigeria and the suitability of hybrid library services provided to distant learners. It examines the challenges in creating and delivering well-integrated and functional library services for distance education and the prospects of a hybrid library in a developing country like Nigeria.

**Key Words:** Libraries, Open and distance learning, virtual library, libraries, hybrid library, Nigeria

### **1.0 Introduction**

Education is widely recognised as central to sustainable economic and social development. African countries, however, face tremendous challenges vis-à-vis other geographies and regions. The open and distance learning mode has become imperative in helping to cope with the rapidly increasing demands for all levels and forms of education. It is also a viable alternative in addressing the government's limited capacity to expand the provision of education through traditional brick-and-mortar institutions. Since its introduction in Africa, open and distance learning has enabled several countries to provide relatively affordable

and flexible forms of access to formal education. This raises the bar in educational delivery in several countries of Africa. The ODL mode is gradually permeating the African continent. It is becoming an acceptable learning mode in delivering specialty courses such as agriculture, healthcare, good governance, business and entrepreneurship training, etc. It is being used as a veritable means for reducing poverty levels by developing human resource capacity. Despite this, there are challenges facing open and distance learning in Africa.

### **1.1 Problem Statement**

Open and distance learning is a unique educational delivery different from traditional face-to-face classroom interaction. It tends to deploy various delivery modes to reach learners who may be geographically separated from the place of instruction. A significant component of adequate educational provision is available library services. However, the critical concern is how to reach distant learners with library services. In Nigeria, although a lot has been written about virtual libraries, more needs to be accomplished in reaching out to learners at a distance with virtual library services. Library practitioners in Nigeria still grapple with integrating traditional library services with functional and productive virtual libraries in a well-articulated hybrid portal.

### **1.2 Research Questions**

- i. What is the status of library services in ODL institutions in Nigeria?
- ii. What form of library service is most suitable to distant learners in Nigeria?
- iii. What are the challenges of distance learning in Nigeria?
- iv. What are the challenges in providing timely library services to distant learners in Nigeria?

### **1.3 Objectives of the Study**

This study aims to determine the suitability of hybrid library services for distant learners in Nigeria. Specifically, the objectives include:

- i. To determine the status of library services in ODL institutions in Nigeria.
- ii. To analyse the form of library service most suitable to distant learners in Nigeria.
- iii. To examine the challenges confronting distance learning in Nigeria.
- iv. To determine the challenges in providing timely library services to distant learners in Nigeria.

## **2.0 Literature Review**

The subject of virtual or hybrid libraries in Africa has received attention in library and information science literature. Abdelrahman (2012) discussed the hybrid library support model to distance learners in Sudan. The study reiterated the importance of access to appropriate library and information support services for distance learners. The study found that distance learners in Sudan lacked library support. According to Igwe (2022), achieving adequate library support for distance learners is mandatory for the qualitative delivery of instruction and learning. This requires the potent application of information and telecommunications technology to library services. Similarly, Igwe and Onwuchekwa (2016) added that technology is engineering revolution and transformation that is changing

the face of libraries, their functions and services. This technology is giving great impetus to libraries, helping them redesign, redirect and remodel their functions and services and creating virtual libraries as an excellent alternative to providing access to library resources to distance learners. In today's information society, technology is a potent tool to increase productivity and creativity, which helps synthesise and communicate information to clients (Igwe, 2005).

The Association of Colleges and Research Libraries (ACRL) (2008) discusses library services to distance learners and recommends that services be designed to satisfy a wide range of informational, bibliographic, and user needs. The ACRL in the Standards for Distance Learning Library Services outlined the essential component of library services to distance learners. On the other hand, Jones (2003) writes that services to distance learners should be equivalent to services provided to regular students. This underscores the significance of adequate library services to learners. Sujatha (2008) recommends a model of library services for distance learners that will involve a consortium of digital libraries that will plan, coordinate, and implement optimal access to digital libraries. This will involve the creation of a nodal agency to avoid the duplication of resources. This agency will also create the necessary infrastructure to network the digitised resources of all the universities and rationalise access to electronic journals and other resources.

### **2.1 Open and Distance Learning in Africa**

In Africa, the pursuit and development of tertiary through the open and distance learning mode is becoming entrenched. In 1988, there was only one open university in Africa; today, there are twelve. The higher education landscape of the 21<sup>st</sup> century is significantly different from previous centuries. There are more entrants to higher education today than at any time in the past. Higher education in Africa has evolved from an elitist pursuit into a mass system. The pressure of numbers is one thing that traditional institutions are not equipped to cope with. Their capacities can never be raised to respond to the ever-increasing demand. The only alternative is the Open and Distance Learning (ODL) system (Kanwar, 2008).

### **2.2 Open and Distance Learning in Nigeria**

With a population of over 220 million people, Nigeria has 170 federal, state and private universities, 159 polytechnics, 67 monotechnics, 152 Colleges of Education, 34 Colleges of Agriculture, 119 Colleges of Health Services/Technology and 53 Specialized Institutions. Over the past decade, these institutions can only absorb 20% of candidates qualified for higher education. Naturally, the government has been concerned about catering to the teeming, vibrant populace not absorbed by any existing higher institutions. To ameliorate this situation, the Open University of Nigeria was formally established in 1983. This was unilaterally dismantled as speedily as it was established by the then-military regime of Gen. Mohammed Buhari in 1984.

In many cases, distance learning is the only way to achieve the scale, scope and impact required to tackle the challenges of education and training faced in Africa (Daniel, 2005). With access to higher education through the traditional higher institutions in Nigeria less than 20%, the reinvigoration of the defunct Open University of Nigeria seems a natural solution. In 2002, the defunct Open University of Nigeria was reactivated by the National

Open University of Nigeria. This is the only Open University in Nigeria. There are over 45,000 registered students from all classes of society. Currently, there are over 100 Study centres across Nigeria. Course materials are centrally produced at the headquarters and dispatched to the study centres. Students register, collect course materials and attend tutorial facilitation online. A Manager in the rank of Professor with a retinue of other staff directs each centre. Assessments, examinations and evaluations are carried out at the study centres. There are also provisions for library services at every study centre.

### 3.0 Methodology

This study used a simple survey method to gather data from eight approved ODL institutions in Nigeria. These institutions were drawn from the 17 government-approved distance learning institutions (NUC, 2022). The sample was purposively drawn from the total number to reflect the geographical regions of Nigeria, the federal capital territory and the National Open University of Nigeria – the only open university in Nigeria. Table 1 is the total list of approved distance learning centres.

Table 1: List of Accredited Distance Learning Institutions in Nigeria

S/No	University	Status
1	University of Ibadan, Ibadan	Federal
2	Obafemi Awolowo University, Ile-Ife	Federal
3	University of Abuja, Abuja	Federal
4	University of Lagos, Akoka	Federal
5	University of Maiduguri, Maiduguri	Federal
6	Ahmadu Bello University Zaria	Federal
7	Modibbo Adama University of Technology, Yola	Federal
8	University of Nigeria Nsukka	Federal
9	Federal University of Technology Minna	Federal
10	University of Ilorin	Federal
11	Ladoke Akintola University of Technology, Ogbomoso	State
12	Lagos State University	State
13	Olabisi Onabanjo University, Ago-Iwoye	State
14	Ignatius Ajuru University of Education, Portharcourt	State
15	Joseph Ayo Babalola University University	Private
16	Afe Babalola University, Ado-Ekiti	Private
17	Babcock University Ilishan	Private

Source: <https://www.nuc.edu.ng/distance-learning-centers/>

Table 2: Selected Universities for data gathering

S/No	Universities
1	Federal University of Technology Minna
2	University of Maiduguri
3	University of Abuja
4	Ahmadu Bello University
5	National Open University of Nigeria
6	Olabisi Onabanjo University, Ago-Iwoye
7	Ignatius Ajuru University of Education, Port Harcourt
8	Joseph Ayo Babalola University

The data were analysed using simple percentages, frequency and qualitative analysis.

## 4.0 Results and Discussion

### 4.1 The status of library services in ODL institutions in Nigeria

Table 3: Data on virtual library services in selected institutions

	FUT Minna	Uni Maid Lib	Uni Abuja Lib	ABU Zaria Lib	NOUN Lib	OOU Ago-Iwoye	IA Uni Edu Lib	JABU Lib
Home delivery of books	X	X	X	X	X	X	X	X
Web delivery of articles	X	X	X	X	X	X	X	X
Online request of books and articles	X	X	X	X	X	X	X	X
Online renewal system	X	X	X	X	X	X	X	X
Online reservation system	X	X	X	X	X	X	X	X
Online Public Access Catalogue	X	X	X	✓	X	X	X	X
Access to online books	X	X	X	X	✓	X	X	X
Access to Newspapers online	X	X	X	X	X	X	X	X
Access to online journals	✓	✓	✓	✓	✓	✓	X	✓
Information literacy/online access to tutorials	X	X	X	X	X	X	X	X

Table 4: Frequency of virtual library services in the selected institutions

	Institution	Frequency	Percentage (100%)
1	Federal University of Technology, Minna, library	1	11.1
2	University of Maiduguri, library	1	11.1
3	University of Abuja library	1	11.1
4	Ahmadu Bello University Zaria, library	2	22.2
5	National Open University of Nigeria	2	22.2
6	Olabisi Onabanjo University, Ago-Iwoye	1	11.1
7	Ignatius Ajuru University of Education, Port Harcourt	0	0
8	Joseph Ayo Babalola University	1	11.1
			100%

The randomly selected approved distance learning institutions, as indicated in table 2, comprised four federal universities of the Federal University of Technology (FUT) Minna, University of Maiduguri, University of Abuja, Ahmadu Bello University, Zaria, National Open University of Nigeria; two state universities of Olabisi Onabanjo University, Ago-Iwoye and Ignatius Ajuru University of Education, Port Harcourt and one private university, i.e., Joseph Ayo Babalola University. The library services of these institutions

were examined to ascertain the virtual services designed to serve students, particularly distance-learning off-campus students. Table 3 reflects outlined virtual library services selected libraries could design to reach distance learning students. The data from the table suggest that all the services listed are unavailable in any of the universities except for availability and access to online journals. The data shows that only the Ahmadu Bello University library has a visible online public access catalogue. The National Open University of Nigeria provides access to e-books unavailable in other selected libraries.

From the data, it could be deduced that distance learning students in Nigeria lack adequate library services to pursue their studies. Table 4 summarizes the status of virtual library services to distance learning students. The data indicate that only the Ahmadu Bello University, Zaria, and National Open University of Nigeria libraries provide an insignificant 22.2% of service that can benefit students of distance learning. The other federal and state institutional libraries provide 11.1% of service to distance learners. The Ignatius Ajuru University of Education, Port Harcourt, has no visible library service for distance learners.

#### **4.2 The form of library service suitable to distant learners in Nigeria**

Libraries are indispensable institutions in every tertiary education. As Jagannathan (2006) notes, libraries have always been a primary focus for all kinds of learning, formal and informal. The library is at the heart of the traditional university or college, providing access to collections, specialist help support, use of technology and a place to study alone or with other learners (Watson, 2006).

In trying to delineate the mode of library services to distance learners, Jagannathan (2006) proposes libraries without walls. This describes a library without physical infrastructure and the traditional components of the physical definition of a library. This paints a picture of a virtual library that can be accessed through the Internet without any geographical restriction. This comes from the understanding that information and communications technology has permeated and transformed all aspects of life, work, and education, including library and information services. This makes accessing books and other information resources through computers and networks seamlessly possible, creating libraries without walls. Browning (1993) posits that implementing this vision transforms libraries into catalysts of profound change.

Despite the low level of technological development in Nigeria, technology is enhancing the capacity of library services to be delivered to distance learners. While open and distance education is an effective and versatile means of addressing the problems of human resource development in Africa, a significant concern is adequate and appropriate services to support distance students. There is growing recognition that providing good library services is crucial (Watson & Jagannathan, 1996). Distance education presents new challenges in information dissemination, especially in developing countries. Therefore, preparing and presenting library services to open and distance learners in Nigeria invoke unique issues.

Leveraging the information revolution in contemporary times, technology has given us the opportunity and privilege of creating hybrid libraries. Interestingly, this helps us to access and utilise learning resources on our palms without a physical visit to the library's four walls. It is established that hybrid libraries connote libraries that are not restricted to the physical boundaries of the library building and all the paraphernalia of traditional library services. Such libraries can be accessed and utilised wherever there is internet access. Even in developing countries, it is no longer news that information and communication technologies have dramatically transformed every segment of society, particularly information collection, processing, storage, retrieval and dissemination.

Therefore, library services to distance learners in Nigeria should aim at value-added services that can reach off-campus students. Several projects should be initiated in all the distance learning institutions in Nigeria. The library and information services structure in the University of Ibadan, Federal University of Technology, Minna, University of Maiduguri, University of Abuja, Ahmadu Bello University, University of Nigeria, Nsukka, the National Open University of Nigeria, etc. should be hybrid. The NOUN library should take the lead and provide a right path to functional hybrid library services to distance learners. Each library should operate practical high-speed internet services with accessible electronic resources and databases. Library services *ab initio* should be fully computerised, and an online catalogue should be accessible to staff and students from anywhere in the world. In the National Open University of Nigeria, small libraries to support distance learners should be available at the various study centres. These would provide access to various forms of collections to learners, the majority of whom still have cyberphobia – fear of computers. The plan for the NOUN library to develop a veritable network of libraries, with the main library at headquarters, and core libraries at Kaduna, Enugu, Benin, Port Harcourt, Calabar and Abuja, should be facilitated.

### **Information Literacy**

User education is a significant component of effective library services. Library instruction is designed to enable library users to benefit maximally from library resources and services and inculcate the necessary skills for lifelong learning. For distance education learners, user education is equally important. How do we reach the myriad of distance learners scattered across every corner of Nigeria with information literacy? This is a Herculean task. Online tutorials and multimedia packages accessible on the web and DVD ROM are evolving for the National Open University of Nigeria staff and students.

### **4.3 The challenges confronting distance learning in Nigeria**

Aderinoye and Siaciwena (2008) rightly observe that despite ODL's success in Africa, several issues beckon for attention:

**Lack of political support and legitimacy.** There still needs to be more knowledge of the potential and limitations of ODL in many African countries. It is surprising that several countries in Africa still believe that ODL cannot offer the same quality of education as traditional campus-based education. Many educational policymakers and planners remain sceptical about the legitimacy and quality of ODL.



**Policy issues:** Most African countries are contending with policy summersault in educational administration. In this kind of circumstance, no clearly defined policies for the development and implementation of ODL programmes. This has been a major setback to many ODL institutions in the continent. Wright, Dhanarajan & Reju (2009) observe that it is becoming clear that sustainability and success have been remarkable where there are unambiguous policy directives governing the application of open and distance learning. Where these were not there, failures are high.

**Inadequate capacity:** Lack of infrastructure and professional competencies in ODL remain essential barriers. In many African countries, there is a dire shortage of qualified staff required for guiding and influencing the development of ODL policies and for planning, developing, managing, and evaluating ODL programmes. In addition, most ODL institutions are handcuffed by financial constraints. Kinyanjui (1998) observes that many distance education institutions in Africa have been started without adequate funding and their rapid growth and expansion outstrip the available resources. As a result, they have been unable to maintain both the quantity and quality of their services and the efficiency of their operations.

**Sustainability:** Many ODL programmes fail because they are not fully integrated into mainstream education systems. Consequently, ODL programmes tend not to attract the political support required for successful implementation.

**Africa faces enormous socio-economic challenges.** Moreover, there is increasing recognition and acceptance that education may be the only way to ensure the sustainability of communities and nations as healthy, vibrant and functioning societies and democracies and for individuals to escape from the vicious cycle of poverty (Wright, Dhanarajan & Reju, 2009). Interestingly, many successful ODL programmes across the continent are underway, and efforts are being designed to address the development challenges. One of these viable efforts is providing virtual library services. In Nigeria, for instance, it was found that an academic resource that cuts across boundaries should be employed to support all the students remotely located in all the study centres (Ngimwa, 2007).

**Digital Divide.** Taylor (2022) refers to the digital divide as the “gap between demographics and regions that have access to modern information and communications technology and those that do not. It is a term used to include the technical and financial ability to access and utilise technology and the internet or the lack of access. It also encompasses the gap between those with access to cell phones and those without access. The digital divide is still a critical problem in African distance learning delivery. There is still a noticeable gap between the “developed and developing countries, urban and rural populations, young and educated versus older and fewer education members of the society, and men and women.” In African countries, it is postulated that the urban-rural divide is the single most significant factor in the digital divide. The digital divide in Africa spreads from the access to the use divide and the quality-of-use gap. As the need for distance education increases, the digital divide cuts off several learners from educational opportunities.

### **Low Internet Penetration**

Internet penetration in terms of quality and affordability is comparatively very low. Data shows that Africa is seriously lagging on the digital front comparatively. Compared to the rest of the world, the quality and affordability of the internet in Africa are low. Data from the Internet World Stats (2022) indicate that the average internet penetration in Africa in

2019 was 39.6 per cent compared to 62.7 per cent in the rest of the world, although there is immense variation in African countries, ranging from 89.8 per cent in Kenya to 5.3 per cent in Burundi. Furthermore, in 2017, Africa used only 1 per cent of the world's total international internet bandwidth. The median mobile broadband download speed in Africa is 2.7 megabits per second (Mbps/s). This is approximately half the global median of 5.2 Mbps/s. There is also the monthly cost of a fixed broadband connection of 36.6 per cent of gross national income, compared with 14.5 per cent globally.

#### **4.4 The challenges in providing timely library services to distant learners in Nigeria.**

Some of the significant challenges facing distance learning institutions in Nigeria in developing and implementing appropriate library services to distance learners include the following:

- i. lack of trained personnel – lack of knowledgeable, dedicated human resources
- ii. paucity of fund
- iii. low-capacity infrastructure – Nigeria is still struggling with fundamental technological challenges such as minimal bandwidth and inadequate IT infrastructure critical to successfully exploiting digital resources (Ngimwa, 2007).
- iv. low Internet penetration and access, low perception of the worth and value of libraries
- v. government's lethargic approach to virtual libraries.

#### **CONCLUSION**

The goal of every university library in Nigeria is to facilitate the realisation of the university's tripartite functions, including teaching, research and community service. No tertiary institution can exist without adequate library services. The challenge of providing library services to distance learners is enormous. However, technology has provided the impetus to break boundaries and reach distance learners. Despite hurdles and barriers, Nigerian Universities should be poised to harness the benefits and potentials of information and communication technology developments to create hybrid libraries that would become benchmarks and reference points in Sub-Saharan Africa.

## REFERENCES

- Abdelrahman, O.H. (2012). A basic hybrid library support model to distance learners in Sudan. *Journal of Librarianship and Information Science*, 44(1):19–26.
- Aderinoye, R. & Siaciwena, R. (2008). International review of research in open distance learning. *Trends and Issues in Open and Distance Learning in Africa*, [http://www.irrodl.org/miscfiles/call\\_for\\_papers\\_africa.html](http://www.irrodl.org/miscfiles/call_for_papers_africa.html)
- Association of Colleges and Research Libraries (ACRL) (2008). *Standards for Distance Learning Library Services*. Available at: [http://www.ala.org/ala/mgrps/divs/acrl/standards/guidelines\\_distancelearning.cfm](http://www.ala.org/ala/mgrps/divs/acrl/standards/guidelines_distancelearning.cfm).
- Browning, J. (1993). Libraries without walls for books without pages: electronic libraries and the information economy. <https://www.wired.com/1993/04/libraries/>
- Daniel, J. (2005). Open and distance learning in Africa. *15CCEM Mid-Term Review for Africa and Europe*, November 14, <http://www.col.org/colweb/site/pid/3585>
- Igwe, U.O. (2020). Libraries without walls and open and distance learning in Africa: The Nigerian experience. *Library Philosophy and Practice (e-journal)*. 4301. <https://digitalcommons.unl.edu/libphilprac/4301>
- Igwe, U.O., & Onwuchekwa, E.O. (2016). Creating a virtual library for distance learners in Nigeria. *Journal of modern education review*, 6, 101-108.
- Igwe, U.O. (2005). Harnessing information technology for the 21st century: Library education in Nigeria. *Library Philosophy and Practice (e-journal)*, Libraries at University of Nebraska-Lincoln. <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1027&context=libphilprac>
- Internet World Stats: Usage and population statistics (2022). <https://www.internetworldstats.com/africa.htm#dz>
- Jagannathan, N. (2006). *A library without walls for distance learners of South Asian region: A Dream dar-fetched. The Fourth Pan-Commonwealth Forum on Open Learning* (<http://pcf4.dec.uwi.edu/viewpaper.php?id=271>)
- Kanwar, A. (2008). Signs of the times: Change or be changed? Third Convocation of the Tamil Nadu Open University, Chennai, India, January 3, 2008, <http://www.col.org/colweb/site/pid/5072>
- Kinyanjui, P.E. (1998). Distance education and open learning in Africa: What works or does not work. *EDI/World Bank Workshop on Teacher Education through Distance Learning, Addis Ababa, Ethiopia*.

<https://oasis.col.org/colserver/api/core/bitstreams/0bbc159f-0960-4cde-b6ac-1063eee3a517/content>

Magusin, E. & Kay, J. (2004). Collaborating on electronic course reserves to support student success. *The Eleventh Off-Campus Library Services Conference Proceedings: Scottsdale, Arizona, May 5-7, 2004*, edited by Patrick B. Mahoney. Mount Pleasant, MI: Central Michigan University, pp. 189-195. Reprinted in *Journal of Library Administration*, 41(1/2): 255-264.

Ngimwa, P. (2007). An African experience in providing a digital library service: The African Virtual University example. *The Fourth Pan-Commonwealth Forum on Open Learning* <http://pcf4.dec.uwi.edu/viewpaer.php?id=196>

Sujatha G. (2008). *Digital Library Initiatives in India: A Proposal for Open Distance Learning*. Available at: [http://www.iatul.org/doclibrary/public/Conf\\_Proceedings/2008/SujathaGurram.pdf](http://www.iatul.org/doclibrary/public/Conf_Proceedings/2008/SujathaGurram.pdf).

Taylor, K. (2022). The digital divide: What it is, and what's being done to close it. Investopedia. <https://www.investopedia.com/the-digital-divide-5116352>

Watson, E.F & Jagannathan, N. (Eds.) (1996). Library services to distance learners in the Commonwealth, Vancouver, B.C., The Commonwealth of Learning, 247p.

Watson, E. (2006). Panel description: Libraries without walls. *The Fourth Pan-Commonwealth Forum on Open Learning, Jamaica* <http://pcf4.dec.uwi.edu/viewpaer.php?id=270>

Wright, C.R., Dhanarajan, G. & Reju, S.A. (2009). Recurring issues encountered by distance educators in developing and emerging nations. *International Review of Research in Open and Distance Learning*, 10 (1). <https://files.eric.ed.gov/fulltext/EJ831714.pdf>