

INCLUDING THE EXCLUDED: PROVIDING EQUITABLE ACCESS TO INFORMATION

AN INAUGURAL LECTURE, 2011/2012

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UNIVERSITY OF IBADAN

# INCLUDING THE EXCLUDED: PROVIDING EQUITABLE ACCESS TO INFORMATION

An inaugural lecture delivered at the University of Ibadan

on Thursday, 17 May, 2012

By

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Ibadan University Press Publishing House University of Ibadan Ibadan, Nigeria.

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First Published 2012

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ISBN: 978 - 978 - 8414 - 81 - 0

Printed by: Ibadan University Printery

The Vice-Chancellor, Deputy Vice-Chancellor (Administration), Deputy Vice-Chancellor (Academic), Provost of the College of Medicine, Dean of the Faculty of Education, Dean of the Postgraduate School, Deans of other Faculties and of the Students, Distinguished Ladies and Gentlemen.

#### Preamble

Mr. Vice-Chancellor Sir, it is to the eternal glory of God that I stand before this august assembly to deliver this year's inaugural lecture on behalf of the Faculty of Education. It is the thirty-third lecture from the Faculty and the seventh from the Department of Library, Archival and Information Studies. The academic icons, who earlier gave maugural lectures, stressed the importance of access to information as the cornerstone of our profession and discipline. Professor Ogunsheve's seminal lecture (1975) was titled, "The Records of Civilization", in which she discussed the various media of communication that provide access to the world's literature. Professor Aboyade (1981), a distinguished scholar, titled her lecture, "The making of an informed society". She discussed how access to information is an imperative and also a catalyst to societal transformation. Other distinguished forerunners in this "relay race" are Professor W.O. Aiyepeku's (1989) with his catchy title, "Developing Information for Development Information", Professor B.C. Nzotta, titled his lecture, "Information, Communication and Cultural Engineering", Professor P.O. Fayose (2003) wrote on, "Children, Teachers and Librarians: Developing Information Conscious Children", and Professor 6.0. Alegbeleye's lecture (2008) title was, "Past Imperfect, Present Continuous, Future Perfect: The Challenges of Preserving Recorded Information in Nigeria". Each of these lectures, from different perspectives, points to the fact that access to information is critical, and in the Department of Library and Information Studies, our major concern is to provide a platform whereby every information seeker or user will have her needs met satisfactorily. That sounds very simple and straightforward. However, the

processes that go into information and knowledge management, the technology that make information accessible to people, even the multifarious target groups that use information, the technology-driven information sources and materials, are not so easy to describe. In our days, as people have realized that information is a critical asset for development, so have the issues concerning information provision and access become more complicated. Access to information is not equally distributed to all communities in terms of the quality and quantity of information resources provision, and in terms of preferred formats and freedom of choice of formats.

# Access to Information and Equity

Inequities in information creation, production, distribution and use, are nothing new (Lievrouw and Farb 2001). Throughout human history, some people have been more educated, better connected or better informed than others. They opine that equitable access to information is a fundamental and necessary condition for effective personal, achievement and social participation, in whatever contexts. They cited Sen (1992) whose opinion was that every plausibly defensible ethical theory of social arrangements tends to demand equality in some 'space', requiring equal treatment of individuals in some significant aspect, in terms of some variable that is important in that particular theory. They concluded that in information studies, and some other fields, information access is that important variable, that significant 'space'. Thus, information equity has value of itself, and inequities of access and use have significant social consequences.

Initially, access meant capability to obtain information from diverse published and unpublished sources, later on; it meant having access to computers to obtain needed information in the networked digital world. Today, access means access to the Internet and the World Wide Web (WWW). In the global digital information age, those who are either unable

to access the Internet and the World Wide Web through the application of ICTs are increasingly being marginalized in their access to information (Cullen 2001). Between the developed and the developing nations, there is a yawning gap in the state of ICT development and levels of access and utilization of the Internet. Information communication technologies are concentrated in only a few countries e.g. only fifty-five countries account for ninety-nine percent of global spending on information technologies (Human Development Report 1999). The result is that the global gap between the haves and the have nots, between the know and the knownots, is widening. This phenomenon is what is known as the Digital Divide.

Studies on this theme have identified specific groups of people as being especially excluded in their uptake of ICTs (Cullen 2001; Brooks et al. 2005). These include people on low incomes, people with few educational qualifications or low literacy levels, the unemployed, elderly people, people in rural areas, people with disabilities, single parents, women and girls. The digital divide has become a convenient description for this perceived disadvantage of those who either are unable to, or do not choose to make use of these technologies in their daily lives.

The digital divide is also applicable to scientists, researchers, and students in the developing world who are excluded from the valuable information resources, indexes and full text databases that are available on the Internet leaving them, especially in Africa, excluded from knowledge that may be vital to social and economic development. The digital divide can exist between those living in urban and rural areas, between the educated and uneducated, between economic classes and on a global scale, between the more and less industrially developed nations. The term digital divide does also often exclude and alienate persons with handicapping conditions, who may have learning disabilities, emotional disturbances, impaired hearing or impaired sight.

In order to bridge the gap created by the digital divide between the sighted and persons with visual impairment, the principle of inclusion is applied. Inclusion is a principle borrowed from the discipline of special needs education which states that children with special needs should be placed in the regular school classroom which they would have otherwise attended if they had been normal children. In other words, each child belongs to the regular classroom and therefore, there should be no condition imposed to exclude her from that environment (Garuba 2003).

The Salamanca Statement and Framework for Action (1994) asserts that:

Regular schools with inclusive orientation are the most effective means of combating discrimination, creating welcoming communities, building an inclusive society and achieving education for all... (Salamanca Statement, Art 2)

Fortunately, Section 7 of the revised National Policy on Education (2008) explicitly recognizes that children and youth with special needs shall be provided with inclusive education services. The commitment is made to equalize educational opportunities for all children irrespective of their physical, sensory, mental, psychological or emotional disabilities (Ajuwon 2008). Oke (2006) has reported the efforts being made and the successes recorded at the practice of inclusive education for secondary school visually impaired children at the Federal Government College, Ijanikin, Lagos State, Nigeria. I have borrowed the concept of inclusion to show the imperatives of providing equal access to information to persons with visual impairment because of the dynamism of the present day information environment and the need for everyone to be included.

Today's inaugural lecture titled, 'Including the Excluded: Providing Equitable Access to Information', shows how the library and information science profession, in its functions and services emphasizes access to information. It

also describes persons with visual impairment and their need to receive equitable information service from all stakeholders. The Internet as an integrating force is the gateway to the superhighway, providing equitable access to all users, regardless of disability. It is the convergence of digital and information communication technologies (ICTs) that is bridging the gap between the sighted and persons with visual impairment, giving them unrestricted access to the brave new world of the information society.

Mr. Vice-Chancellor Sir, I wish to state categorically, at this juncture, that the library and information science discipline is the mother of all disciplines. This assertion arises from the key facets that characterize the discipline. First, what distinguishes the library and information science discipline is that our universe of study and observation is the universe of documentation (Bates 2012). Library and information science (LIS) addresses the subject content of all the conventional academic disciplines, by managing their records from the perspective of creating collections of value for study, research, teaching, learning and entertainment etc. We attempt to organize all published literature, in all disciplines, in all formats print, non-print, multi-media, digital (electronic)—for easy access through the library processes of appraising (selection), collecting (acquisition), organizing (cataloguing and classification), storing (preservation), retrieving (retrieval), disseminating (providing access to information) and utilizing. Information organization enables information access and use through systematic usercentered description, categorization, storage, retrieval and preservation. We also create the organizational systems that make information in all its myriad forms, available and accessible.

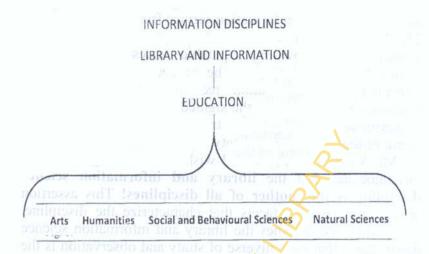


Fig. 1: The spectrum of the traditional disciplines

Adapted from Bates, J. M. (2012)

The second major facet of our claim is that the input and output that we handle, i.e. information, is indispensable for human development and survival. It plays a crucial role in practically all human activities; its value in developmental processes is immeasurable. Information is so critical to human existence that it has been described as the fifth need of man, ranking after air, water, food and shelter (Kemp 1976). How can we define it?

#### Information Defined

Information is amenable to several definitions, depending on the context. To the legal practitioner, information is evidence; to the statistician, it is data; to the economist, information is a resource and to government and her agencies, information is confidential records. In library and information science, information is a know-how resource sometimes used synonymously with knowledge. Its definition also derives from its attributes which are:

Information has a clear life cycle: collection, transmission, processing, storage, dissemination, use and disposal.

 Information may be processed and retined, so that raw materials e.g. databases are converted into finished products like published directories, or manuscripts converted to books.

 Information does not decrease with use. Sharing information always causes it to increase, therefore, it is self-multiplying.

 Information is constantly changing and extending the boundaries of knowledge.

As 'the prime commodity' of the present age', Issa (2002) states that information influences decision-making and problem solving. To underscore this fact, Popoola (2005) posits that the survival of man in society depends on information availability, accessibility and utilization for problem solving, planning, decision-making and control. Access to information is critical for enabling citizens to exercise their voice. It is seen as vital for empowering all citizens, including vulnerable and excluded persons.

We live in a world of explosions, from nuclear bombs to improvised Boko Haram bombs. One explosion that is seemingly harmless by comparison, yet it is felt by everyone everyday is the information explosion. The volume of information in the world, especially the volume of electronically-stored information on our computers has increased exponentially since the 1980s. ICTs have brought about an unprecedented level of information explosion to every sphere of our lives. Yet information continues to increase, seamlessly altering and extending the boundaries of knowledge (Eaton and Bawden 1991) so much so that the period from the latter decades of the Twentieth Century to the present day, is called, 'the Information Age'.

The Information Age has since turned into the Digital Age, which is characterized by the ability of individuals to

transfer information freely, with computer, and to have instant access to information, from the Internet, that would have otherwise been difficult or impossible to find. Instant electronic access to digital information is the single most distinguishing attribute of the present Information Age. The elaborate retrieval systems that support such access are a product of ICT, the application of which has brought a revolution in information discovery and access.

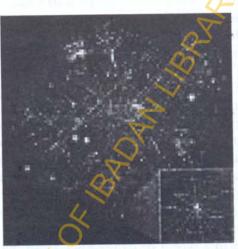


Fig. 2: The internet map

The Internet is an excellent hallmark of the Information Age. It has created the information revolution and is exercising enormous influence in the commercial, educational and social sectors of every economy of the world. To give just an example, in education, for instance, the Internet has become the preferred technology to improve instruction, increase access and raise productivity. University in a lactors can now post their plabi, course outlines and reading lists on the World Wide Web. Library holdings are digitized and made available both on and off campus. The Internet enables users to access the websites of universities, libraries, governments, research centers and other organizations to avail themselves of a wide range of information, research materials, conference

proceedings, and job opportunities. Internet access has brought a tremendous change in every sector of human activity.

Another important facet of our discipline is that the entire human race is our constituency! Libraries are for everyone. In fact, everyone without exception needs information which libraries acquire and organize for use. As information professionals, we identify information users and user groups; study their information needs, their information seeking behaviour and tailor our services to satisfy those needs by providing access to information.



Fig. 3: Users in the library seeking access to information

This service is central toolibrary and information recience. It is the heart of it. We grease the wheels of knowledges on that the people we serve cannon sult those human records more easily and effectively, using what they find too improve themselves and their communities (Rubin 2010).

We have built elaborate institutions, differentitypessoff libraries, national, public, school, special, privatee academics, to provide appropriate library and information services too general and specific user groups. Librariess recognize useer groups such as students, scholars, researchers, and children. Even the names of the libraries indicate their blass to particular user groups. For example, the academics library serves the

higher education community, the public library is the people's university, and school libraries are for primary and secondary school students. Whereas everyone needs and uses information, access to it is not equitable. Women in general, rural populations, the poor, neo-literates, persons with hearing, visual and other impairments are user groups whose access to information is marginalized for one reason or another.

Mr. Vice-Chancellor Sir, my contribution to research has probed the problems of access to information of some at risk groups like the neo-literates in Africa (Atinmo 1995a), secondary school pupils with hearing impairment (Atinmo 1995b, Egunjobi and Atinmo 2011), rural dwellers (Atinmo, Dawha and Jimba 1996), and battered wives (Atinmo 2000b). My major research focus, however, has been on library and information services to persons with visual impairment Atinmo (1979, 1982, 1983, 1984), Atinmo and Dawha (1997, 1998), Atinmo (1999), Atinmo and Inyang (1999) Atinmo

(2000a, 2002) Atinmo (2007),

My choice of persons with visual impairment as subjects of study and research emanated from my decision to focus my doctoral research in this area. Why was I interested in library services to visually impaired persons? This was a virgin area of research in the 1980s. In my search for a doctoral research topic, I spent a semester on an Inter-University Council grant at the University of Manchester to hone my ideas and decide on an area of study. In November 1980, my Head of Department at that time, Professor B.O. Aboyade nominated me to attend the International Federation of Library Associations' (IFLA) three-day bilingual seminar funded by UNESCO for representatives of twelve African countries, in Arusha, Tanzania. The purpose of the seminar was to promote interest in library services to visually impaired people, to share information and to suggest ways of developing an extended library service. The seminar recommended the establishment of a national Braille press in each participating country and producing Braille educational materials, well as increasing access to existing materials through odnter-library loan, nationally and internationally among resu

With a Martinus Nijhoff study grant in 1981, I was opportuned to travel through five European countries: Germany, Denmark, Norway, The Netherlands and Great Britain, to observe their production and distribution of alternative materials, and study their library services to visually impaired persons.





Fig. 4: Trip to libraries for the visually impaired

I found people's reaction a bit discouraging, initially. As a matter of fact some people were quite skeptical; someone asked if we had satisfied the information needs of the sighted before considering the visually impaired. Another advised me 'quite honestly' to find another area of study. One female journalist from Tribune captioned my interview with her, 'The Handicapped Librarian', but I put it all to the negative attitude people had, and may still have, towards disabled persons generally.

To familiarize myself with my subjects, I started to visit schools for the visually impaired, one of which was the Pacelli School for the Blind, a primary school at Yaba Lagos

(1982).

I visited Primary 4, where I watched a scenario which has remained with me ever since. The teacher had marked the students examination scripts and was about to write her report for each child. But she wanted to be sure that she had correct totals. The best student in mathematics, who was nicknamed 'the computer', was standing before the class. As she reeled out the examination scores for each child, 'the computer'

immediately told her the sum total which she checked against her own total. I thought, here was a genius in the making, but that talent would remain untapped without appropriate reading materials. How many of such 'computers' are locked up behind blindness and visual impairment? With a little help and alternative reading materials, these children could attain their potentials.



Fig. 5: Inclusion in the classroom at the Federal College of Education (Special), Oyo.

I am happy to report that interest in research into equitable access to information for persons with disabilities, is being gradually stirred up as under my supervision, two doctoral dissertations on library services to persons with disabilities have been successfully completed, and the third doctoral candidate is ready for the oral examination, with others lined up behind him. It has been quite rewarding working, studying and researching with colleagues interested in service to visually impaired persons. We live in an exciting world pervaded by information everywhere. The motivation to share information is very strong; everyone has a right to equitable access to information.

Persons with Visual Impairment: A Profile

The term **visually impaired** is generally used to describe 'all those who have a seeing disability that cannot be corrected by glasses' (Hopkins 2000). There are the legally or medically blind with a visual acuity of 20/200 or less in the better eye after correction i.e. the person can only see or read from 20 feet away what the normal eye would see/read from 200 feet away. There are also the educationally blind who are sometimes described as totally blind because they have no vision and they cannot read print. The education of such people must be through writing and reading Braille. There are also the partially sighted who have some useful residual vision. Their educational materials should be large print.

Persons with visual impairment in every society are ordinary human beings with vision loss that constitute significant limitations to their visual capabilities. Such people contend with visual systems defects. It is estimated that loss of one eye equals 25% impairment of the visual system and 24% impairment of the whole system. Total loss of vision in both eyes is considered to be 100% visual impairment and 85% impairment of the whole person (Adetoro 2008). Borrowing from Shakespeare's categorization of people.

Some are born great, some achieve greatness, and some have greatness thrust upon 'em. (Twelfth Night Act ii Scene 5)

Visually impaired persons may be categorized in a similar way. Some people are born blind, some acquire blindness in old age due to some eye disorder, and some have blindness thrust upon them through an accident or a disease. In this lecture, the term visually impaired refers to all these categories.

Visual problems adversely affect a child's development, and depending on the severity, type of loss, age at onset—motor cognitive and/or social development may be delayed. Therefore, such children need to be assessed early in order to benefit from early intervention programmes, which could include learning to read and write Braille or using equipment to aid reading. Technology in the form of computers and low-

vision optical and video aids enable many visually impaired children to participate in educational activities. They can also enjoy access to information; their reading needs could be met through Braille literacy.

through Braille literacy.

The woman/lady who loses sight in later life has a problem of adjustment to her new status. She must acquire new skills such as mobility skills and independent living skills so that she does not become burdensome on her family. She may not lose her job, but if she does, she has to acquire additional skills for livelihood. But her most pressing problem would be access to information and reading materials. Persons with visual impairment are also print disabled. They cannot read regular print materials so their reading and information materials must be produced in alternative formats such as Braille, large print or audio books.

Visual impairment imposes restrictions and limitations which are not only physical and functional, but also social and psychological on the individual. Telford and Sawrey (1981) list the restrictions as follows:

Preventing direct access to the printed word;

Restricting independent mobility in unfamiliar surroundings;

 Limiting direct perception of distant environment, and objects too big to be apprehended by touch; and

 Depriving the individual of important social cues (body language and non-verbal communication cues).

Sight is of tremendous importance to our education. Much of our learning comes through vision—the ability to see. Cobun (1968), while emphasizing the importance of sight to our learning, posited that:

An overwhelming 83% of our learning is through visual experience. We learn about 1% through taste and another 1% through touch. The sense of smell provides about 3% and of hearing about 11% of what we learn.

In support of this opinion, Obani (2002) observed that through personal observations of events in the environment, people gather much incidental information and educate themselves. Through reading print, sighted people acquire information and knowledge. Lack of vision puts persons with visual impairment at a great disadvantage. They cannot read ordinary normal print materials, and so they face exclusion from acquiring education both informally and as formally presented in the different educational settings, including libraries and information centers. They cannot gather information from street signs, posters, or the writing on CDs they love to hear, or see the goods they want to buy.

In spite of the disadvantages, persons with visual impairment are just as intelligent as the rest of society in any part of the world (Tucker 2007). This is proved right by the number of blind judges, lawyers, writers, parliamentarians and administrators in the world. Nigeria has her fair share of professionals with visual impairment as lawyers, teachers, physiotherapists, technocrats pastors and others in executive positions in different walks of life. In the 2004/2005 session, the University of Ibadan graduated Femi Fadeyi, a visually impaired law student with a first class honours degree. Visually impaired persons have made their impact on society and are capable of living fulfilling lives.

A blind woman attested to the fact that there are actually benefits in being blind. She asserted that the other senses of blind persons become sharpened to make up for the loss or lack of vision. This is one reason they can read Braille. But more importantly, blind persons are able to 'see' people with their hearts rather than in the superficial clothes they wear or the cars they ride. Therefore, blind people are great judges of character who are able to relate to people more deeply than the sighted people. They are also good listeners. Shari-Rae Tillikainen (2007).

In Nigeria, there are only estimations of the population of persons with visual impairment. Adima (1989) estimated that about 3% of Nigerians are blind, while Atinmo (2002) estimated that the number must be much higher than that.

Four categories of persons with visual impairment are identifiable:

1. Those in institutions of learning, at primary and secondary schools, and those in tertiary institutions: colleges of education, polytechnics, universities, vocational and technical centers.

2. Those who have had formal education and are either

employed or unemployed.

3. Those who became blind through accidents, diseases or old age. They may have been in regular employment and need rehabilitation services.

 The illiterates, who represent the majority, and who are mostly begging on the streets. These include

children, men and women.

Unlike in the past, there are now many more persons with visual impairment in secondary and tertiary institutions who need reading and educational materials in alternative formats. But the Nigerian government has not responded to the aspirations of this segment of her population beyond enacting the policies on special needs education, the implementation of which leaves much to be desired; the provision for the training of teachers at the Federal College of Education (Special) Oyo (the only one of its kind in sub-Saharan Africa); and the establishment of the departments of Special Education at the Universities of Ibadan and Jos. Access to information through the provision of alternative reading formats has not received attention from the government and so has remained an intractable problem.

The Conceptualization of Access to Information

Without access to information, there can be no exchange, use, collection or management of information.—Jaeger (2007)

Buckland (1991) defines "access" as the means to enable an inquirer to learn from, to become informed, by a source pertinent to an enquiry. He also states that access to information refers to all the provision and use of retrieval

based information services and he identifies different means of providing access to information. For example, indexes provide a subject access to collections, censorship impedes access to materials, new telecommunications technologies permit remote access, fee-based information services are differentially accessible because not everyone can afford the cost, most library collections are open access, i.e. users can go directly to the shelves, some services are inaccessible to the wheelchair bound, and if the materials are not in alternative format, they are inaccessible to visually impaired persons.

Jaeger and Bowman (2005) define information access as 'the presence of a robust system through which information is made available to citizens and others. They described three elements of such a system as physical, intellectual and social components that affect the availability of information to individuals. Thus, access to information is a combination of these three elements which we shall now discuss in terms of

their application to best practices in library services.

The physical elements are the information resources which may be in print, multimedia or electronic formats. Libraries have become so overwhelmed by the avalanche of information-carrying digital assets they have to acquire that they have resorted to all kinds of resource sharing activities as coping strategies. A good example is the Nigerian VTLS project whereby six Nigerian universities, in partnership with wo Foundations namely, MacArthur and Carnegie, and the Mortenson Center for International Library Programs, USA, agree to automate the libraries' processes and ensure that their patrons have better access to library collections and services (Fatoki 2011). Access issues necessitate the automation of catalogues for online access. This requires retrospective conversion by which the library's print based catalogues are converted to machine readable catalogs (MARC). Online public access catalogues (OPAC) are thus produced. Several Nigerian university libraries including the Kenneth Dike Library have embarked on this time consuming, yet necessary task.

The intellectual element is concerned with the organization of library resources for access. The traditional library catalogue is the basic tool for information discovery and access. Users retrieve documents through requests containing author, or title or subject information. The bibliographic standard developed to address this kind of knowledge organization is the Anglo-American Cataloguing Rules (AACR2 1978). From an historical perspective, cataloguing codes have been developed since the Nineteenth Century from Panizzi (1841), till we arrived at AACR2 (1978) which has also undergone several revisions, 1988, 1998, and 2002. For subject access, a cataloguer peruses a text, using key words to determine what the work is about, in an attempt to give the text subject headings. She then converts the key words into Library of Congress Subject Headings, after which she must look for the appropriate classification number using the Library of Congress Classification Scheme. Omekwu, cited by Zaid (2008) in describing the complexity of cataloguing and classification traced the journey of the book from the publisher to the point of access thus:

A book is published, a librarian receives notice and decides to add it to the collection, submits an order. The item arrives, is processed, catalogued and classified, then it appears on the shelf ready to be found, identified, selected, obtained (or borrowed) and used by user. These processes are long, tortuous and repetitive.

Today, the library catalogue operates against a backdrop of flashy and powerful alternatives for information discovery, like the search engines: Google, Yahoo, Alta Vista and numerous others. The World Wide Web (WWW) has become the people's encyclopedia of choice. Library users instinctively turn to the search engines for their information needs. The fact that they instantly receive full text materials on their desktops, wherever they are located, without having to be physically present in a library undermines the value of a library catalogue which gives information about a surrogate,

the original of which must be located from the library shelves.

Library catalogues are responding to these stiff competitions through a multifaceted approach. With the advent of computers and electronic databases In the 1990s, catalogue cards were abandoned for online public access catalogues (OPACs) which changed the way users accessed the catalogue (Coyle 2007). OPACs enabled several users to simultaneously access the catalogue and search by any word, anywhere in a heading. But the popularity of the online catalogue was short lived, according to Markey (2007). The reason was the mass digitization effort of Google, and its singular objective to 'organize the world's knowledge'.

AACR2 has been found no longer adequate as a standard for bibliographic description. It is print oriented and designed essentially for book cataloguing and linear arrangement. The new standard Resource Description and Access (RDA) has been field tested and the Library of Congress has announced the starting date of implementation as March 2013. RDA is a new generation cataloguing code designed for all types of resources, analogue and digital, and to create records that are

usable in the digital environment.

The social element of information access is applicable to a new model of library service tagged Library 2.0. It is a model that invites user participation in the creation of both physical and virtual services. It seeks to harness user knowledge through comments, reviews, tags, ratings to feed user-created content back into library websites. Information thus shared among users will facilitate information flow in all directions—from library to user, library to library, user to library and user to user. Examples of Library 2.0 services are:

**Blogs:** enable the rapid production and consumption of web-based publications.

Wikis: are open web pages where anyone registered with Wikipedia can publish.

Blogs and Wikis and other social networks make library collections and services more interactive and user-centered.

As users now prefer non-traditional and non-library sources of information and methods of information discovery, libraries are responding likewise by providing user-driven interactive web services to maintain their position as priority information providers. There is so much information available which technology has made easily accessible. No one needs to be excluded for any reason from accessing information.

The Problem of Access to Information by Persons with Visual Impairment

The problem of access to information by persons with visual impairment emanates from the scarcity of information materials in alternative formats. There are about 285 million visually impaired people in the world (Pascolini and Mariotti 2010), who need access to books and information for all the same reasons as sighted people: for lifelong learning, for work, for leisure and to play a full part in the society. They cannot read a conventional book, magazine or website. Yet less than 5% of materials are published in accessible formats that persons with visual impairment can read, such as Braille, large print and analogue or digital audio. Brazier (2007) claimed that the same situation prevails in all countries from the poorest to the richest. Also, less than 20% of websites are accessible to them (Mbiyo 2011). This level of provision is obviously not equitable. It means that persons with visual impairment do not have the same level of choice regarding their reading resources as sighted people. Therefore, non availability or insufficient resources hinder access to information, and this is the biggest barrier to full participation in work, recreation and life for persons with visual impairment. This lack of options of reading materials for persons with visual impairment was succinctly described by Wallis (1996) thus:

Users of a print library have options opened to them in locating reading materials. They can seek the assistance of staff or use the library catalogue or just browse the shelves. By contrast, visually impaired persons experience a great deal of intervention by staff, relatives and friends in the process of book selection. This may not only inhibit the borrower's choice, but introduces other factors such as a desire not to be a burden on the helper. Consequently, the borrower may be less discriminating in book choices. In addition, decisions reached by the helper in the choice of books sometimes results in inadvertent 'censoring' of the choices offered.

The foregoing refers to the visually impaired in Australia. In Nigeria this problem has a different connotation altogether. While the struggle to produce enough educational and/or recommended texts in all subjects is still ongoing, recreational reading materials are negligible. Therefore, it is not a question of options or intervention from helpers here. Persons with visual impairment, especially secondary school students, desire to read a variety of materials, such as science fiction, adventure, poetry, drama, romantic novels and everything else (Adetoro and Atinmo 2011), but the options are not even open or available to them. It is hard enough to produce the required texts for educational purposes, there is hardly any fund left for the production of a variety of materials for recreational reading.

The demand for books in appropriate formats is very high, but the supply is extremely low, and this is true at all educational levels from primary to tertiary (Atinmo 1999). In this country, the urgent demand for higher education is not exclusive to sighted youth alone, as those with visual impairment also struggle to be admitted to the various courses at these higher institutions (including courses like mathematics, science and technology which were previously thought to be no go areas for visually impaired students). For them however, their real struggle for success begins when it dawns on them that the library and information resources at some of these institutions are closed to them in terms of:

 Physical access into the library buildings (this might entail architectural modifications, such as provision of elevators and platforms to enhance mobility of the physically challenged).

2. Bibliographic and physical accessibility into the library and information resources necessary for their

reading, research and recreation.

The investigation conducted by Dawha and Atinmo (1996) revealed that visually impaired students regarded the Kenneth Dike Library as a 'prohibited area' to them due to the total unconcern for their academic information needs. There is not one book in alternative format for the blind at Kenneth Dike Library, even as I am speaking. The students have to make private arrangements at great cost to provide their own reading materials. While there is a veritable avalanche of tempting titles for the sighted readers, only about 5% of published materials get transcribed into alternative formats. A survey of fourteen public and private university libraries from Nigeria's six geopolitical zones showed that none of them has resources in alternative formats (Babalola and Haliso 2011). When compared with library service to the sighted, library services to the blind in our country is relatively at an embryonic stage.

# Traditional Forms of Access to Information

For persons who are visually impaired and cannot read Braille, access to information has traditionally been mediated through others, particularly family members or friends, or perhaps a helper or an organization (Atinmo and Inyang 1999). Apart from assisted access to print, radio and audio cassettes, and recently, mobile telephones, have provided the main ways in which people who are visually impaired have accessed information. Braille is commonly used among those who were born blind or became blind at a young age, who learn it in school. Braille is not the common form of communication for people who became blind in later life. Audio formats are recommended for such people.

### Access to Information through Alternative Formats Braille

Visually impaired people use Braille to read and write. Braille is the parallel to print as the reading by touch medium for blind persons. It is the only internationally recognized reading and writing system for the blind and partially sighted people that have been approved by UNESCO (Kavanagh and Christensen-Skold 2005). It is so called after the name of its inventor, Louis Braille, who lived in France in the Nineteenth Century. He lost his sight when he was three years old, as a result of an accident in his father's workshop.

There are different grades of Braille in use. Grade 1 is the simplest—it has one sign for each letter and for punctuation. Higher grades use contractions in a similar way to shorthand and there are also technical codes for mathematics, science, music etc. The following is the Braille alphabet together with common punctuation signs and the number sign.



Fig. 6: Braille alphabet



Fig. 7: Braille embosser and Perkins Brailler

Persons with visual impairment who want to read Braille must learn it, just like one learns a foreign language. Also, reading Braille relies on memory but the reader cannot perceive a number of words at once, as sighted people do in reading print. Braille literacy gives persons with visual impairment access to information resources, and to education, thus giving them an opportunity to gain independent livelihood within their families and communities. The ability to read and write independently has the same socio-economic benefits for blind people, as literacy has for all people in civil society.

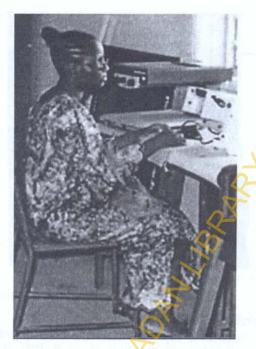


Fig. 8: A woman reading Braille

Braille can be produced manually, using a Perkins Brailler typewriter to produce a master copy. But technology has also made it possible for Braille to be produced by computer Braille machine. Braille books are very bulky and cumber-some; they take up much space on library shelves. For instance, the Bible in Braille is about sixty-five volumes.

#### Large Print

These are books printed in larger size type (ranging from 16-22point). They also take up much space, and many books are not printed in large size because it is not cost effective for publishers.



Fig. 9: Large print

### Tape Recordings

These are recorded tape media, the content of which are played to the hearing of persons with visual impairment. These present an advantage in that some information can be obtained and learning promoted. However, dependence on recorded materials makes a person with visual impairment illiterate in Braille reading, the knowledge of which is essential for educational development. Therefore, tape recordings or audio formats are recommended for those who acquired visual impairment in adulthood.

## Access to Information through Libraries for the Blind

According to Machel (1996), 'library service is one where each individual, regardless of the degree of visual impairment, has access to the materials and information at the time they are required, in a format that can be used, in the quantities that are needed, and where the needs of the user are understood by the staff'. In the Nineteenth Century, libraries for the blind emerged in Europe to fulfill roles in education, training and lifelong learning for people unable to read print. In the United States, government specifically acknowledged a

responsibility for the training and education of its blind citizens as far back as the Nineteenth Century. The ultimate signing of a law to create a national service for people, who are blind in the USA in 1931, was the result of cooperation between libraries and the American Foundation for the Blind. These initiatives sprung out of the need to educate and train visually impaired citizens and provide them with an equitable library service. The establishment of the National Library Service for the Blind and Physically Handicapped (NLS BPH) in that country, is in recognition of the need for a separate, national agency involving all levels of government.

In other countries, the path of development was different. Libraries for the blind often developed outside of the mainstream library system as an extension of charitable agencies whose commitment to the rehabilitation of blind people included providing books they could read. For example, in Canada, Australia and the United Kingdom, there is no fully funded national network equivalent to what exists in the United States, Denmark or Sweden, but there are charitable organizations that provide national accessibility services to their visually impaired people. For example, The Royal National Institute for the Blind (RNIB) is the United Kingdom's leading charity offering information support to over two million people with sight problems. RNIB provides books in Braille, talking books and computer training. Equal access to information is a right for all Australians.

In Africa, there are national libraries for the blind in South Africa, Kenya, Zambia, but there is no such equivalent services in Nigeria. However there are myriads of organizations attempting to meet the reading needs of the visually impaired (see table 1).

Table 1: Government Agencies, Institutions, NGOs and Associations Serving Visually Impaired Persons

GOOVERNMENT AND ITS AGENCIES	EDUCATIONAL INSTITUTIONS	NGOs	BRAILLE PRODUCTION FACILITIES	LIBRARIES FOR THE VISUALLY IMPAIRED	ASSOCIATIONS
Federal Ministry of Education	Federal College of Education (Special) Oyo	Nigerwives Braille Production Center	Nigerwives Braille Production Center	Nigeria Society for the Lind Inlaks Library	National Braille Council of Nigeria (NABRACON)
Federal Ministry of Sports & Social Development. Braille House	Universities Depts of Special Education at Ibadan, Jod, Kano, Calabar, Uyo	Anglo- Nigeria Welfare Association for the blind (ANWAB), Lagos	Anglo-Nigeria Welfare Association for the Blind (ANWAB)	Anglo-Nigeria Welfare Association for the Blind (ANWAB)	Nigeria Association of the Blind (NAB)
State Ministries of Education	Kaduna Polytechnic	Nigeria Society for the Blind Vocational Training Center, Oshodi	Nigeria Society for the Blind, Vocational Training Center, Oshodi	Abia State Library Board	Association of Libraries for the Visually Impaired (ALVI)
State Library Boards	Special and integrated schools: primary and secondary levels	Hope for the Blind, Wusasa, Zaria	Hope for the Blind, Wusasa, Zaria	Imo State Library Board	Student Associations of Disabled Persons
Vocational Training Centers		Gindiri Materials Center for the Visually Impaired		Oyo State Library Board. Also Ogun State Board	r sport types Light political mild spetts an collected

Library Services for Visually Impaired Persons in Nigeria:

Inlaks Library for the Blind, Oshodi, Lagos. This is the library of the Nigeria Society for the Blind, Vocational Training Center. It has two new computer Braille machines with which it transcribes print texts to Braille for persons in educational institutions who make book requests to the library. It downloads texts on request from the Internet onto CD ROMs for a small fee.



Fig 10: Inlaks Library for the Blind, Oshodi, Lagos

It has a state of the art computer room donated by an oil company, which has Internet access with all the software for easy accessibility for the patrons of the library. There is also a cybercafe. The establishment of the cybercafé was a response to the agitations of some blind adults who complained about their lack of privacy in the use of the Internet, that even their private mails had to be read to them.

Anglo Nigerian Welfare Association for the Blind (ANWAB). This is an NGO with a very zealous Director, whose ambition is to make ANWAB the Royal National Institute for the Blind (RNIB) of Nigeria.

The NGO runs a general welfare programme and provides reading materials, handouts and textbooks through its updated computerized Braille production unit for secondary schools and tertiary institutions, especially law students from the University of Lagos. There is also an audio tape recording room for listening to or borrowing recorded books.

These are libraries, not in the conventional sense of public libraries under whose purview fall these special library services. They are regarded as libraries because they primarily produce reading materials in Braille and support those in higher education with necessary textbooks in the format required.

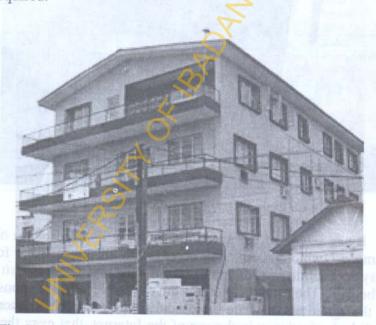


Fig. 11: Anglo Nigerian Welfare Association for the Blind (ANWAB)

The Federal College of Education (Special), Oyo also has a library that produces Braille by computer for its students, there are audio books available but the library could be much better equipped.

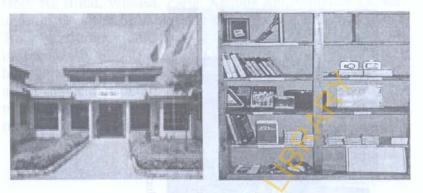


Fig. 12: The library of the Federal College of Education (Special), Oyo

Imo State Library Board, Owerri deliberately had a separate unit constructed in 1981, to serve persons with visual impairment. This was due to the enthusiasm of the then State librarian who was interested in this service and forced the hand of government to provide funds. The Abia State Library Board, Umuahia serves the visually impaired to a limited extent. Braille books are deposited at the Oyo and Ogun State Library Boards, by Nigerwives for distribution to primary and secondary school students in Ibadan and Abeokuta.

### **Braille Book Production Centers**

Nigerwives Braille Book Production Center. Nigerwives is an association of non-Nigerian women married to Nigerians. The book production center is situated in a portakabin at King's College, Lagos. It produces books in Braille for primary and secondary school students all over the country, and also engages in computer training to prepare the visually impaired for the world of work. It has branches in Lagos, Abia, Warri, Enugu, Akwa Ibom, Rivers and Kaduna states through which it reaches out to the visually impaired who otherwise might not have had reading materials at all.





Fig. 13: Nigerwives Braille Book Production Center

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Other places of no less importance that are production and distribution centers for alternative format materials include Gindiri Materials Center for the Handicapped, at Gindiri, Plateau State; Pacelli School for the Blind, Surulere, Lagos; Hope for Blind, Wusasa, Zaria; Kaduna Rehabilitation Center and the Dept. of Special Education, University of Jos, Jos. These institutions and NGO's are working separately and independently of one another. Obi (2003) suggested that the book production centers should network, to share masters and avoid duplication. Obinyan and Ijatuyi (2003) suggested a more inclusive network based on this conceptual model in order to forge collaboration among all the stakeholders.

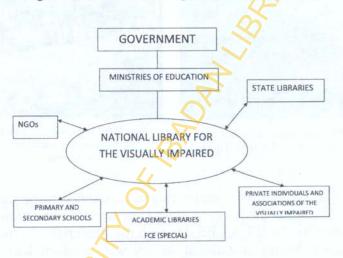


Fig. 14: Adapted conceptual model of stakeholder collaboration for equitable information provision for visually impaired persons *Source*: Obinyan and Jiatuyi (2003)

The Association of Libraries for the Visually Impaired (ALVI). was formed in 1999, to cater for the information needs of visually impaired persons. It became a Section of the Nigerian Library Association although its membership was diverse, including educators of the visually impaired, producers of alternative formats, librarians, civil servants and some persons interested in visual impairment. I was the

pioneer Chairman till 2008. We held annual conferences or seminars or workshops, and floated, *Journal of Association of Libraries for the Visually Impaired (JALVI)*.



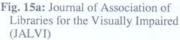




Fig. 15b: Association of Libraries for the Visually Impaired (ALVI) conference

The creation of a union catalogue seemed to be the next urgent need at the time, so, with Ulverscroft Foundation Fund support by the IFLA/LBS, through the Frederick Thorpe Best Practice Award, a national survey was conducted in 2004-2005. The purpose was to set up a computerized catalogue and distribution database of alternative materials for visually impaired people in Nigeria, based on the need to provide access to information nationally and internationally to blind and visually impaired persons. Another purpose was to create a template for database entry, which could be replicated by other developing countries.

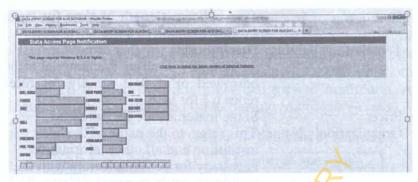


Fig. 16: Catalogue database template

The Template created contained the following fields:

Author: The individual or corporate body res-

ponsible for the intellectual content of

the material.

Title: The title of the material was copied

from the Braille or large print material; for talking books, titles were taken from the labels of the cassette or the

catalog of the hosting institution

Subject: This was determined from the call

number and or title of the material

User level: Primary, secondary or tertiary as

indicated by the host institution or

investigator's judgment

Publisher: Publisher information was either given on the material or provided by the

hosting institution where possible Supplied if found on the publication Supplied if found on the publication

Number of volumes: Braille books usually run into several

volumes

Publication year:

Edition:

Languages: Refers to the language of the material Format: The alternative format in Braille, large

print or tapes

Status: This indicates the Braille grade of the

material, whether 1 or 2.

Duration: This indicates length of time for tapes

as shown on the cassette

Terms of availability: This indicates whether or not the host

institution will allow the material to be borrowed or if it is strictly for refe-

rence o r for sale.

Price: Some materials are for purchase

Organization's Name: This refers to the name of the host

institution and all other information necessary for communicating with the institution, such as postal address, Web

site address and email address.

The Holdings

From the template, a total of 1,860 entries were made of alternative format materials, which were either produced within the country or received from domestic or foreign donors. There were more titles from Lagos than from any other state, and several states (Bauchi, Benue, Cross River, Enugu, Kano, Ogun, Osun and Rivers) held less than twenty Braille titles each. There are collections of tapes in three institutions: at St Joseph's, Calabar, at the Vocational Training Center in Oshodi, Lagos and at the Federal College of Education (Special) Oyo. ANWAB also has a tape collection, but the size was not indicated. Only the Oyo State Library Board has titles in large print. Some states have visually impaired students but no materials. These were Adamawa, Akwa Ibom, Delta, Ebonyi, Jigawa, Katsina, Kebbi, Nassarawa and Taraba. Some of the institutions in these states had only one or two visually impaired students. Therefore, they might be reluctant to spend any money or effort to get Braille books for just a handful of students. Some states (6) had neither a school for blind and visually impaired persons nor alternative materials. Lagos state was far ahead of other states in materials provision. Kano State, with a larger population of visually impaired persons, however, had very few entries

The nature of the holdings is illustrated in table 2. The subject data is not complete and only covers 1,449 of the 1,860 items held, but it does illustrate the paucity of holdings in major areas of study. Not surprisingly, there are more books on religion than any other category of nonfiction. A database was designed and created using Microsoft Access.

Table 2: Distribution of Alternative Materials by Subject

Subject	Number of Materials
Fiction	507
Religion	246
Literature	173
Science Fiction	77
English Language	63
Special Education	41
Economics	40
Biography	39
History	34
Social Studies	29
Mathematics	25
Life and Living	24
Integrated Science	23
Agricultural Science	19
Biology	19
Music	18
Government	17
Health Education	15
Detective Stories	14
Motherhood	13
Business Studies	11
Career Guides	10
Science //	10
Computer Science	06
Cookbooks	06

### Institutions and Services

Seventy-one institutions were visited.

Table 3: Distribution of Institutions by Type

Type of Institution	Number	%
Secondary schools	33	46.8
Special education centres/ Special schools	10	14.1
State Library Boards	9	12.6
Tertiary institutions I.e. Universities, Polytechnics and Colleges of Education	7	9.9
Ministries of Education/ Vocational Training Centres	6	8.5
NGOs	6	8.5
Total	71	100

Table 3 shows that more secondary schools were visited than any other type of institution because visually impaired students are integrated with the sighted at this level, so they are more widespread. In fact, there may be fewer than ten in any one school. These students are also integrated with their sighted peers at the tertiary level, but their number is greatly reduced at this level. The reason for this may not be unconnected with the dearth of information materials for them. These institutions provided information on the equipment available to them and the services provided for visually impaired students.

## Equipment

These institutions have equipment that would be expected in places serving visually impaired persons. Perkins Braillers were held by 43 institutions. The functionality of the machines was not determined, but many respondents complained about the state of disrepair of their Perkins Braillers – for example, only one out of ten machines functioned properly. The typewriter (27), slate and stylus (17), tape recorder (11), abacus (7), thermoform (7), computer systems (7), Braille Embosser (6), writing frames (4), hand frame (3), recording studio (3), radio set (2), and Smart view CCTV (2) were found in various institutions. It

was not surprising that many respondents did not possess the slate and stylus. Only 5 institutions are Brailling by computer, which means that Brailling is normally produced manually.

### Services Provided

These institutions offer a range of services including the following:

Braille Services: This involves Brailling educational material such as handouts, examination papers, and even text books manually or with the Braille embosser. The method of Brailling differs as some institutions use Perkins Braillers while others use embossing machines. This naturally affects their productivity.

Computer Services: This has two connotations. It may mean the transcription of a textbook with the Brailler machine or computer training at cost for some individuals. It may also mean the use of assistive technology as two institutions have screen readers.

Counselling Services: The Library services may be variously defined because the institutions offer these services in various ways. There are some institutions that have a place designated as 'The Library', which contains alternative format books relevant to the needs of the visually persons. There are other institutions with no place designated as 'The Library'. Yet they meet the requests of their clientele through customized services. They produce Braille books on request at the price of the print edition.

Rehabilitation Services: Rehabilitation services are offered to people who became blind in adulthood and may not be able to learn Braille. These services are also provided for adult blind illiterates who want to be gainfully employed. These services are customized according to individual needs to enable the person to adjust psychologically, educationally and vocationally to a new way of life. They also include mobility training.

Support Services: This service was considered worthy of mention because the particular service was initially set up for hearing impaired undergraduates at the University of Ilorin, Kwara State. The unit helps visually impaired undergraduates to locate appropriate reading materials.

The Visually Impaired Respondents: A Profile

There were 452 respondents to the questionnaire on the reading and information needs of blind and visually impaired persons in Nigeria, but only 433 (95.1%) of the questionnaire were usable for analysis. There were 277 (64.4%) and 153 females (35.6%) respondents. They were from every level of the educational cadre, from primary school to postgraduate level. This indicates that the visually impaired Nigerians are achievers, their disabilities notwithstanding. They are quite articulate in their requests for adequate reading materials, and rather than complain several of them have resorted to Brailling their materials themselves or appealing to foreign donors for book requests. The questionnaire returns provided insights into issues relating to the educational background of the respondents, and those concerning Braille reading and writing.

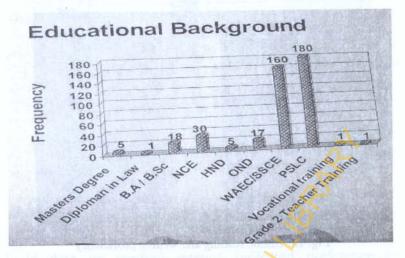


Fig. 17: Educational background of visually impaired respondents

Figure 17 shows that most of the respondents, 180 or 41.8% possessed the primary school leaving certificate (PSLC). These were followed by respondents who had the secondary school certificate (SSCE) or the West African Examination Certificate (WAEC). There were also respondents who had a Master degree (5 or 1.2%) and a first degree (18 or 4.2%). This indicates that the visually impaired persons could earn higher degrees if given the chance. There is a sharp decline in number between secondary and tertiary level students. There were 70 (16.3) candidates at the tertiary level compared to 340 (79.35) at the primary and secondary school levels. It would be a point of research interest to investigate the reasons for this, in particular to measure the aspirations of visually impaired persons for higher education compared with the challenges they face in obtaining a conducive environment for their studies.

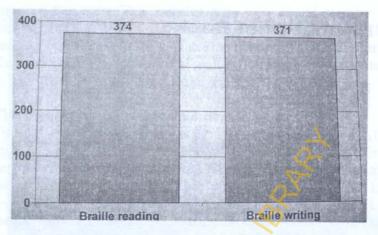


Fig. 18: Braille reading and writing proficiency

Figure 18 shows that 374 (86.9%) of the respondents could read and 371 (86.3%) could write Braille proficiently. Braille reading and writing are essential skills for visually persons. Not surprising, 85% prefer Braille to reading large print. However, 75% had no personal Brailling or recording equipment, and only 12 % owned a slate and stylus. Consequently, it would be expected that respondents would use libraries or Braille production centers. However only 50% have done so. This means that in all probability libraries and Braille production centers are not located within reach of the respondents or they are ignorant of their existence. Some tertiary level students confirmed that they buy print books and then record on tape, but only 20% or respondents had personal collections. Their efforts are commendable, but the materials produced are limited to individual use. As long as these self efforts persist without deliberate intervention from government and other stake holders, the information deficit and paucity of alternative materials for the visually impaired persons will persist.

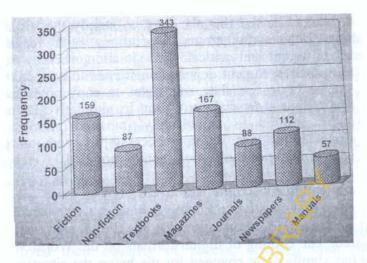


Fig. 19: Respondents reading and information needs

Field data on reading interest indicated preference for textbooks as respondents were desirous of educational advancement. Fiction, magazines, newspapers and journals were indicated as other reading preferences.

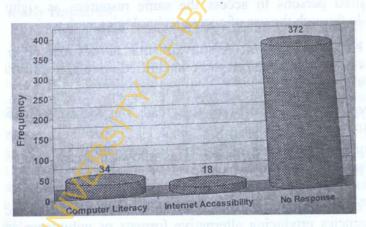


Fig. 20: Respondents computer literacy and internet accessibility

Computer literacy and internet accessibility was minimal.

The study showed that the need to supply the visually impaired students in tertiary institutions with readable material is urgent and critical. The situation whereby each visually impaired student depends on friends to read lecture notes to her or to use slate and stylus to copy notes from books is archaic. Materials provision in alternative formats should be ensured to all visually impaired persons in educational institutions. Internet accessibility with all the assistive technologies should be urgently provided.

Access through Electronic Resources

Computers and assistive technologies have caused a paradigm shift in access to information for the blind and visually impaired. The coming of digital formats on the World Wide Web has significantly changed for the better the situation of visually impaired persons as far as access to information is concerned. For the first time in history visually impaired persons are able to read from original sources of information available on the World Wide Web, at the same time as everyone else! Also, the Internet has enabled visually impaired persons to access the same resources as sighted people through the use of access technologies such as:

Screen Magnification: A software that allows text or graphics on computer screen to be magnified up to sixteen times the original.

Screen Reader: A software that reads out the content of a document to the reader.

Voice Recognition Software: This allows the user to input data into the computer by voice.

For using digital information resources, no mediators such as agencies producing alternative formats or volunteers and friends to read are needed. Individual access to original sources of information is possible, and this is particularly important to people who lost sight in their later life, as they rarely learn how to use Braille (Williamson et al. 2000). For

the first time also, visually impaired persons are able to choose what suits their needs and requirements, without being on the receiving end of some decision-makers as to what they should read. However, in using the World Wide Web, research has shown that one of the major problems in accessing the Internet is poor Web page design (Williamson et al. (2000). For instance, visually impaired persons have difficulty with Web pages that have images and other non-textual elements. Research in this area is still ongoing to resolve these problems.

The good news is that, today the Internet has made it possible for visually impaired persons to access information at the same time as sighted users. This has dramatically improved their equality of access, bringing both 'independence and choice, two of the fundamental freedoms' (Porter 1997). The only difference is that the access mode is speech or large print and that keyboard commands must be used instead of clicking with a mouse.

Online Library Catalogues and Digital Collections for the Visually Impaired

At the international level, IFLA Libraries for the Blind Section has as one of its missions, the strategic plan to 'promote the evolution of the digital library for the physically handicapped, emphasizing collaboration and international resource sharing. There is a need for a union catalogue of accessible formats, as in some countries there are over a hundred producers of accessible formats, and efficient cross-searching of catalogues of accessible formats at the international level, should be an aim to strive for. Including Braille holdings in national and regional catalogues is one of the principles in the guidelines for library service to Braille users.

There are large on ine national catalogues of accessible formats, such a cose of the UK, National Library for the Blind and the Canadian National Institute for the Blind. This catalogue also includes electronic texts (VisuTEXT module),

and Web access to newspapers (VisuNews module), and of the U.S. National Library Service for the Blind and Physically Handicapped (includes New Zealand, Canadian and some European agencies holdings data as well). Can we now be rest assured that equitable access to information is finally within the reach of persons with visual impairment? I believe the Internet and assistive technologies have a resounding positive answer!

The database that was created is an access point to alternative materials available in Nigeria.

Strategies for Improving Library and Information Services to Visually Impaired Persons in Nigeria

Mr. Vice-Chancellor Sir, there is no doubt that Nigerians who are visually impaired are desirous of access to the world of information. We have shown that the library has a vital role to play in combating exclusion and encouraging an inclusive society. Fortunately, the Internet has made it possible for libraries to widen access to information for all categories of users including the visually impaired. This is a wakeup call for our libraries, to stir up themselves to their moral responsibilities of providing resources in alternative format for the visually impaired users to ensure equitable access to information.

### Recommendations

Mr. Vice-Chancellor Sir, an inaugural lecture will not be complete without making some salient recommendations, pertaining to outstanding issues that need to be addressed. The major problem in providing equitable access to information for the visually impaired in Nigeria is that the establishments producing and distributing alternative materials are working separately, whereas they could network. Successful networking is generally the result of multistakeholder initiatives, involving governments, NGOs, academia, communities, donors and funding agents, and it seems to be the most pressing need that should be addressed at this

time. To network, all the participating institutions must be ready to collaborate to share master copies and other facilities.

The National Library has not been much involved in this area of service, but really, as the apex library, it should act as the coordinating body to the stakeholders and ensure that state libraries develop their collections of alternative materials for visually impaired persons.



Fig. 21: The proposed building housing the National Library of Nigeria

One advantage of this arrangement is the possibility of producing an endogenous knowledge database of Nigerian books available in Braille and other formats. Each state library should also maintain a register of visually impaired persons in the state, with a profile of their reading needs and an update on their educational and employment status.

Specific organizations and educational institutions should be selected as nodal points for production and distribution of certain kinds of materials. For example, the Federal College of Education (Special) Oyo, should be mandated to produce tertiary level books. The Departments of Special Education in the universities should also be book producers. The NGOs should continue to produce books for primary and secondary school level students and ensure that these books are available to all who need them.

Internet accessibility and the use of assistive technology should be fully deployed in all these institutions to give students rapid and equitable access to global information. They must prime themselves to receive quality education so that they can compete on equal basis with sighted persons with the possibilities that assistive technologies and the Internet have provided. Computer literacy as well as information literacy must become mandatory for all students.

The visually impaired persons must become the advocates of their own cause to articulate their demands to government and other concerned bodies. The associations of visually impaired persons should create public awareness of their needs and make themselves visible. Here is a good example. Stevie Wonder, as one of UN's messengers of peace advocates for disabilities. Visually impaired persons need to give a loud voice to their requirements.



Fig. 23: Stevie Wonder advocating for the disabled persons

To ensure the success of all these moves, the Federal Government should aggressively infuse funds into the education sector for the establishment of infrastructure that would ensure equitable access to information for visually impaired persons. Education reform is presently being touted in this country. The President should put action behind his promises and extend the "good luck" to the state libraries and educational institutions.

The possibilities for total inclusion into the society is now more than ever very real for visually impaired persons, with the different technologies appearing everyday to make life more qualitative. In the picture below is a visually impaired shopper in a supermarket, using his iPhone to receive descriptive information about the goods he wants to buy. Now with the aid of an iPhone, the blind can virtually 'see' colour, light, paper money and much more!! Here is a picture of total independence, a state of being that visually impaired persons very much cherish.



Fig. 23: Freedom at last!

#### Conclusion

Mr. Vice-Chancellor Sir, it was the Lord Jesus Christ Himself who initiated the practice of inclusion. In the days of his flesh, he went about doing good, healing all that were oppressed of the devil. He turned around the lives of the following categories of people: women, lepers, Samaritans, Gentiles, tax collectors, prostitutes, adulterers, and people with various handicaps like the blind and deaf. By performing miracles which rid them of their ailments, diseases or handicaps, He got them reintegrated and included into society. Mr. Vice-Chancellor Sir, the Lord Jesus Christ is still in the business of inclusion today. He wants no one excluded from His Kingdom.

In this inaugural lecture, I have tried to make it abundantly clear that technology and the Internet have opened the floodgate of information to include the previously excluded visually impaired persons, and even beyond that to give them a qualitative life and a sense of independence. The Nigerian citizen who is visually impaired needs help, fired by determination from all stakeholders to reach this attainable utopia. This was my dream in the 1980's when the idea of equitable access to information for visually impaired persons was hatched. It is gratifying to know that the dream did not die, rather it has been invigorated. Equitable access to information, you are welcome!!!

Acknowledgements

It is now time for me to acknowledge with gratitude all those who have had a positive impact on my academic life and my total being as a person. I am indebted to so many people, time may not permit me to mention them all. I must first of all acknowledge the Almighty God whose I am and whom I worship. His abiding Presence has sustained me; His hands have upheld me and pulled me out of an early grave. I am eternally grateful to the Lord Jehovah, my Father, my Saviour, my Healer, my Strength and my All in All.

I thank God for the kind of man who fathered me, late Mr. S.O. Akande, of Oke-Foko, Ibadan, who inspired my love for

books and reading. He wanted to build me a library, but God had other plans. *Maami*, Mrs. M. O. Akande (nee Okunoren) an Amazon. All your children rise up and call you blessed, and indeed you are blessed at 90 years of age, and still going strong. I acknowledge with much gratitude the love and support of Emeritus Professor of Medicine, Professor T. O.

Ogunlesi. Thank you, Sir.

I wish to quickly acknowledge the presence of my Kabiyesi, the Alaye of Odogbolu, Oba Adedeji Onagoruwa, Elesi I, my Baba oko, and his amiable Otori, Dayo Onagoruwa, and thank both of them for gracing this occasion. I thank all my teachers at all levels of my schooling, from primary and secondary school through universities both in Nigeria and America. I want to appreciate my teachers at Syracuse University's iSchool of Information Studies, especially Professors Marta Dosa and Antje Lemke. They helped to cut my wisdom tooth in library and information studies.

I came looking for a job in the then Department of Library Studies in September 1975. Within ten minutes of my conversation with Professor F. A. Ogunsheye, the doyen of librarianship in Nigeria, I had a job. Little did she realize that I had been her secret admirer since her days as the hall warden of Queen Elizabeth Hall, when I was a student in the 1966/69 sessions. She also supervised my doctoral thesis, availing me of the benefit of her academic prowess. *Mama*, I am grateful. My gratitude also goes to Professor B.O. Aboyade who has shown more than a keen interest in my career growth and development.



Fig. 24: The trans (Professor B.O. Aboyade, and Professor F. A. Ogunsheye) and I

I also wish to thank all my colleagues in the Department of Library, Archival and Information Studies: Professors Alegbeleye and Mabawonku for their kindred spirit, Dr. Okwilagwe, the current Ag. HOD of LARIS, Drs. Nwalo, Abioye, Popoola and Adetimirin, Mr. Apotiade, Bada, Akangbe, Ogudua, Mrs. Evelyn Emeahara, the librarian, and retired Mrs. Okpako, Mrs. Akinnibosun, for their support at all times, and for the non-academic and library staff for their devotion to duty. I am grateful to the current Dean of the Faculty of Education, Professor C.O.O. Kolawole for his support. I wish to thank also Professor L.O. Aina, for his untiring effort at promoting scholarship, Professors Tiamiyu and Elaturoti, all staff of ARCIS and Abadina Media Resource Center.

In the past 30 years, I have been privileged to supervise very many students at the BLIS, MLS and Ph.D levels. I appreciate each of them for allowing me to mentor them as I was mentored. Those who have completed their doctoral studies under my supervision include Professor, E.M.K. Dawha, Head of the Department of Library and Information Science, University of Maiduguri, Dr. Sam Jimba, former Permanent Secretary, Ministry of Information Nassarawa

State, and now the Nigerian Ambassador to Poland, Dr. Niran Adetoro, Head of the Department of Library Studies at Tai Solarin University of Education, Ijebu-Ode, Dr. Rotimi Egunjobi, the College Librarian at the Adeyemi College of Education, Ondo, Chris Nkiko is the Librarian at Covenant University, Mr. Alimi. There are many outstanding others who occupy positions of authority in different establishments in Nigeria and abroad.

I recently completed my sabbatical leave in the Department of Information Resources Management at Babcock University, Ilishan, Ogun State. It was a rewarding experience for me, and I want to thank the management of that Institution, the Dean of the Faculty of Education, Professor Remi Opeke and Associate Professor Yacob Haliso

for their pursuit of excellence.

Mr. Vice-Chancellor Sir, I wish to thank my school mates, members of Queen's School Old Girls Association (QSOGA), especially my classmates known as Queens' 63. You are all wonderful people Yinka Sanni, Yinka Falusi, Iyabo Emmanuel Oluwafemi and her husband, our dear patron, Ladun Akinawo, Yetunde, Enitan, Femi, Tokunbo and many others. The joy and laughter of adolescence, then sharing experiences of motherhood, and now grandmotherhood, are unquantifiable. A special thank you goes to Tanwa Odebiyi, retired Professor of Medical Sociology at OAU who has been and still is a friend in need. The Spina group led by Professor Jide Ajayi (Jagun Aso), including Yemisi and Dele Akinluyi, Engr. Oluwole Dare, B.G.K. Ajayi, Felix Adenaike, Dele and Pippy Fawole, Dipo Afolabi, Debo Okewole, S. G. Adeleye, Akinbo Adesomoju, Kunle Bademosi, Wole Osonubi, Teru Akinnawo, Olu Akinloye, Abox and Enitan Bababunmi and Bosun Animashawun. You are hereby appreciated. Thank you for all the jokes.

I must not forget the pioneer members of the Association of Libraries for the Visually Impaired (ALVI), for their untiring effort and sacrificial giving, the teachers and colleagues from the Federal College of Education (Special), Oyo, Dr. Theo Ajobiewe, Dr. Femi Quadri, Mr. Abilu, Miss Kazeem, the college library staff, all the visually impaired

students, respondents of my many questionnaires, Mr. Obasoro of Inlaks Library, Oshodi Lagos, Mr. Akinola of Nigerwives, Mr. Danlami Basharu of ANWAB, Mr. Owolabi (OwoBlow), Sola Omilabu, Adonis, Chuks and many others.

I am grateful to you all.

My sincere gratitude also goes to those who have attended to my spiritual upbringing. Retired, but not tired General Pastor of Glory Tabernacle and his amiable wife, Dr. and Dr. Mrs. U.A. Obed, the current General Pastor and his lovely wife, Dr. and Mrs. G. Akinbola, and the Eldership Council, the women especially the Bodija women all of Glory Tabernacle Ministry. As disciples of the living God, we shall make Heaven in Jesus Name. I express my heartfelt gratitude to Pastor Debo Daniel, his wife and the members of Total Armour Ministry, the Glorious Life Fellowship (GLF) sisters and prayer warriors, I do appreciate you all. I thank my Lord Bishop, the Methodist Bishop of Jiebu Diocese, Rt. Rev. Adegbemi A. Adewale LLM LLB, for blessing this occasion.

I have received some support from various organizations, and I want to seize this opportunity to appreciate them. They include the British Inter-University Council, Martinus Nijhoff, Ulverscroft Foundation of Great Britain, Force Foundation and Roterdam of Netherlands. The IFLA/Libraries for the Blind Section (IFLA/LBS) also supported me through the Frederick Thorpe Best Practice Award.

Finally, I wish to express my gratitude and appreciation to my dear husband, Tola Atinmo, Knight of John Wesley of the Methodist Church and Professor of Human Nutrition, University of Ibadan, Fellow of the International Academy of Food Science and Technology, (FIAFoST), a Prince and illustrious son of Odogbolu, and father of Olufunmilayo and Adeniyi, Damilola, Kolapo, Tobiloba, Mofiyinfoluwa and Oluwapelumi. I thank God that the 'endless Alleluya', the refrain to the recessional hymn at our wedding is still resonating and getting louder. We are indeed more than conquerors. I thank my siblings and their spouses, Jide and Lola Akande, Kayode and Tundun Akande, Lekan and Tokunbo Saola and their children and grandchildren all in

diaspora. I also wish to thank the entire Akande, Okunoren, Onagoruwa and Atinmo families for their support at all times.

Mr. Vice-Chancellor Sir, I have another dream, the best is yet to come. Distinguished ladies and gentlemen, thank you all for listening. Do all you can to be included in the kingdom of Christ. May God bless you all.

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# BIODATA OF PROFESSOR MORAYO I. ATINMO

Professor Morayo I. Atinmo (nee Akande), was born of Christian parents some sixty five years ago, the eldest of four children. She had her secondary and higher school education at the prestigious Queen's School Ede (1959-1965), from where she proceeded to the University of Ibadan, graduating with a B.A. (Hons) English in 1969. At that time, there was no National Youth Service Corp, but she had a semblance of that experience at the Baltimore, Maryland, USA, school system, teaching for one year on a programme termed the

Experiment in International Living.

Professor Atinmo earned her master degree in library and information science from the School of Information Studies, Syracuse University, Syracuse New York (1974), and her doctorate degree from the Department of Library, Archival and Information Studies (LARIS), of the University of Ibadan (1987). It is in this department she systematically climbed the academic ladder from assistant lecturer (1976) to a full Professor of Library and Information Science (2002). In the course of this long academic career, she has supervised more than one hundred master degree students and about twenty doctorate students, some of whom have become professors, university librarians and heads of departments in their various institutions. She also held administrative positions in the University as Head of the Department of LARIS (2004-2007), and Dean of the Faculty of Education (2007-2009), at different times executive member of several Boards, and Senate member in the University of Ibadan. She is the current Mistress of Queen Idia Hall, University of Ibadan.

Professor Atinmo's academic discipline covers organization of information, i.e. cataloguing and classification, indexing and abstracting, and user studies. Her research has sought to determine the variables that increase information access, retrieval and transfer strategies of different user groups such as information professionals, agricultural scientists and engineers. She has also conducted extensive research into the problems that constitute hinderances to adequate library and

information service provision to specified user groups

especially marginalized and excluded persons.

Professor Atinmo has pioneered the establishment of several libraries. She is the pioneer research librarian of the Guardian Newspaper library (1986), which today is the model for newspaper libraries in Nigeria. She is the current Chairman of the Management Board of the Oladipo Diya Library and Information Technology Resource Center, Odogbolu, a brand new library, envisioned to be the center of excellence for information resource provision for the Odogbolu community in particular and all levels of educational institutions in Ogun State and its environs.

Professor Atinmo has published more than forty papers in peer-reviewed scholarly journals, and chapters in books. The focus of her research efforts have been directed at determining how marginalized and exceptional persons, such as the visually impaired and rural dwellers, can be better integrated into the information world through availability of, and accessibility to information sources in appropriate format, and also through the use of the new information technologies.

Professor Atinmo is a member of several professional bodies, the Nigerian Library Association (NLA), which is the professional organization of Nigerian librarians and information scientists, the pioneer President of the Association of Libraries for the Visually Impaired (ALVI) and member of the International Federation of Library Association/Libraries for the Blind Sections (IFLA/LBS). She has enjoyed the privilege of traveling extensively in Africa, Europe and America, attending conferences, seminars and workshops. In 1981, she won the IFLA grant which enabled her to travel to six European countries, for three months, studying the operations of library services to visually impaired persons in special schools and libraries.

Professor Atinmo is a born again Christian, fully committed to being a model of salvation, sanctification and service to God and humanity. For many years, she has been one of the neighbourhood pastors from the Glory Tabernacle Ministry, Oju-Irin, Ibadan. Her hobbies include reading, dancing and

going for long prayer walks.

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