Use of Technology in Open and Distance Education for Learning Among the Disenfranchised People in Africa: Challenges and Recommendations for Its Actualisation

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Abstract

In line with the provisions of the Science Technology and Innovation Strategy (STISA) 2024, an initiative aimed at accelerating Africa's transition to an innovation - led Knowledge - based Economy, adopting the Open and Distance Education (ODE) as a means to transmitting knowledge through technology to the disenfranchised population in Africa is undoubtedly one of the best options of ensuring that this group have the opportunity to be educated regardless of circumstance, distance or the lack of financial resources. This group includes those displaced by war, inmates, women in the purdah, and housemaids burdened with domestic chores. This paper, therefore, focused on how to use relevant technology in ODE for pedagogy and andragogy among the disenfranchised population in Africa to foreground how technology can be deployed to bridge the knowledge transmission gap for the population. This is germane in the light of the spate of internal violence and other factors that predispose displacement; thus, catalysing sudden migration, which prevents their getting access to education. The objectives are to identify relevant technology facilities that ODE-centred institutions in Africa can deploy in facilitating learning for the displaced; to foreground their relevance in the sustainability schema; and to categorise the modes and methods of ensuring that learning is actualised for them. To this end, the challenges militating the provision of education for the displaced population were discussed along with recommendations so that the population may be included in the scheme of affairs in the African continent

to create a pathway for the realisation of the AU Agenda 2063 and the SDG 4.

Keywords: Open and Distance Education, disenfranchised/displaced persons, learning actualisation

Introduction

The development of Open and Distance Learning (ODL) as a method of reaching learners who are far removed from the teacher and, therefore, unable to engage in formal schooling, has witnessed many stages since the correspondence college and metamorphosed into a systematic intervention facilitated by modern technology. Historically, the first official recognition of education by correspondence was recorded from 1883 to 1891 at the Chautauqua College of Liberal Arts (Jegede, 2013). This college was authorised by the state of New York to grant academic degrees to students who have completed their studies at the Summer Institutes through correspondence in an academic year (Watkins, 1991). In her essay, Watkins (1991) cited that Vincent (1885) wrote:

The day is coming when the work done by correspondence will be greater in amount than that done in the classrooms of our academics and colleges; when the students who shall recite by correspondence will far outnumber those who make oral recitations.

The prediction of Vincent (1885) has come to pass, with the socio-economic dimension of transitioning from providing education through the traditional means of face-to-face classroom mode to providing education across distance for all, irrespective of environmental, social, or cultural circumstances. It is this compelling need that has driven countries to seek the appropriate cost effective and innovative means of responding to the huge and largely unmet demand for education. Similarly, ODL today has developed far beyond mere correspondence to a multifaceted level and status in the process of transmitting knowledge.

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Important Events in the Evolution of Distance Education
1905: Birth of school museums and instructional movement
1910: Birth of instructional films
1920: Birth of instructional radio and the audiovisual instruction movement
1950: Birth of Bob Reiser
1953: Birth of instructional television
1980: Birth of microcomputers
1995: Birth of the total online programme
2000: Birth of M-Learning

The figure above was obtained from Jegede (2021)

This form of education became a mainstream method of learning in Africa, regardless of how appropriately it used during the COVID-19 period, when there was a complete lockdown in education and other activities in most countries. During the period, Open and Distance Learning had to be adopted in many countries in Africa, considering their population, socio-economic needs, and current development indicators. This is so because the versatility of distance education allows it to cater for a variety of learning situations and contexts, which include the full-time and part-time programmes for learners in the working class, continuing professional training, or continuing education.

According to Jegede (2013), distance education accommodates diverse learning styles, provides access to remote and normally inaccessible underrepresented groups such as women in or out of purdah, persons in rural and remote locations, migrant fishermen, and nomadic cattle herders. It is also tailored to meet the specific needs of a variety of learners, including those in unemployment, have family responsibilities, and are older or retired, who wish to embark on professional, leisure, or personal studies.

Table 1: Models of Distance Education: A Conceptual Framework

Models of Distance Education and Associated Delivery Technologies	Characteristics of Delivery Technologies			Highly Refined Materials	Advanced Interactive Delivery	Institutional Variable Costs Approaching Zero
	Flexibility					
	Time	Place	Pace			
FIRST GENERATION - **The Correspondence Model** Print	Yes	Yes	Yes	Yes	No	No
SECOND GENERATION - **The Multi-media Model** Print Audiotape Videotape Computer-based learning (e.g., CML/CAL/IMM) Interactive video (disk and tape)	Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes	No No No Yes Yes	No No No No No
THIRD GENERATION - **The Tele learning Model** Audio teleconferencing Videoconferencing Audio graphic Communication Broadcast TV/Radio and Audio teleconferencing	No No No No	No No No No	No No No No	No No Yes Yes	Yes Yes Yes Yes	No No No No
FOURTH GENERATION - **The Flexible Learning Model** ☐ Interactive multimedia (IMM) online ☐ Internet-based access to WWW resources ☐ Computer-mediated communication	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes **No**
FIFTH GENERATION - The Intelligent Flexible Learning Model	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes **Yes**

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☐ Interactive multimedia (IMM) online ☐ Internet-based access to WWW resources ☐ Computer-mediated communication, using automated response systems ☐ Campus portal access to institutional processes and resources	Yes	Yes	Yes	Yes	Yes	**Yes**

Figure 2 above was obtained from Jegede (2021)

The conceptual model displayed in the figure above typifies the different generations that distance education has gone through, i.e., from print technology to the stage we are today, which integrates flexible learning, m-learning, and internet innovative delivery technologies, clear evidence that ODL is developing and improving. ODL is considered to be better than the conventional approach because learning in ODL is at the convenience of the learners. Through ODL, learning can take place anytime and in any location, depending on the choice of the learner. Similarly, it incorporates a great deal of learner support services and the use of relevant technologies. This is also indicative of the fact that the use of ODL as a method of delivering learning to the disenfranchised population is very helpful and relevant to the needs of learners today.

The Disenfranchised Population in Africa
The people who are considered disenfranchised population include, but are not limited to, the following:
1. People in refugee camps, where a heavy concentration of people who have been dislocated are hosted
2. Women who are in purdah
3. Homes where there are domestic staff
4. People living in correctional centres, such as prison custody and juvenile homes
5. People living in rural communities that are far away from where schools are located

According to the UNESCO Institute for Statistics on Education (Paper No. 45, September 1999), in all regions of the world, sub-Saharan Africa has the highest rates of education exclusion. Over 265 million children are currently out of school, and 22% of them are of primary school age. The world is growing at an alarming rate, and going by the latest United Nations population estimates, Africa is equivalent to 17.89% of the total world population of 8,045,311,447. The projection is such that by the year 2050, the population of the African continent will be about 2,485,135,539, out of which the youth represent about 65%. More than a third of the world's young people will live in Africa by 2050, and sixty percent of Africa's current population of 1.25 billion people are under the age of 25 years, which translates to being the youngest population in the world (UNESCO Institute for Statistics on Education, 2017). Jegede (2023) opines that the youth boom, which is popularly called "youthquake" in Africa, indicates that by 2050, one in three people will be an African, which, according to him, is referred to as 'a seismic change that's already starting to register'. Similarly, out of the 244 million children aged 6 to 18 that are not in school, more than 40%, or 98 million of them live in sub-Saharan Africa, including Nigeria (20.2 million), Ethiopia (10.5), the Democratic Republic of Congo (5.9), and Kenya (1.8), (United Nations Educational, Scientific and Cultural Organisation). These findings show that Africa must be able to count on education to mitigate some of the problems that will arise from the upsurge of the above stated population. This is important, particularly to ensure that education gets to the doorstep of everyone. However, because the disenfranchised people are vulnerable, efforts must be made to ensure that education reaches them using ODL. All these problems enumerated shall, however, be mitigated by the learning opportunity that would be transmitted to the disenfranchised people through the ODL

Using the ODL to provide access to the disenfranchised population is also consistent with the provisions of Sustainable Development Goal 4, which requires every country to promote inclusive and equitable quality education and lifelong learning opportunities for all. Regarding employment and entrepreneurship, the target of Goal 4 is that by 2030, countries should have substantially increased the number of youths and adults who have relevant skills, that are in the technical and vocational

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areas for employment, decent jobs, and entrepreneurship. Therefore, education is recognised as a catalyst for socioeconomic development and an instrument that enhances group solidarity, national consciousness, and tolerance of diversity.

Relevant Technological Facilities

Studies have shown that through Open and Distance Education, it is possible to provide access to learning for the different groups of the disenfranchised population. According to Tenebe, V. A. & Ogidan, R. J. (2014), learning can be transmitted using modern technological facilities that are grouped under the Learning Management System, such as:

- Data casting
- Phones
- Tablets
- Facebook
- Twitter
- WhatsApp
- Instagram
- Telegram
- Interactive Videos
- Online textbooks
- Accessories
- Artificial Intelligence
- Extended Reality
- Gamification

It is through the facilities and platforms mentioned above that learning resources can be transmitted and utilised by learners, regardless of their location. Similarly, learning content that has been carefully prepared in the form of OER and MOOCs can be uploaded to the websites for the use of the learners. Other short learning resources, such as textual scripts and accompanying videos, can also be transmitted to the disenfranchised people, to remove the disadvantage in terms of distance from school and thereby cut down the cost of paying for school fees that are characterised by face-to-face institutions. This would be in line with the mission on Science Technology and Innovation Strategy (STISA) 2024, which is concerned with how to

accelerate Africa's transition to an innovation - led knowledge - based Economy and SDG 4, which propagates the concept of reaching the marginalised population wherever they are (United Nations September, 2015) and thereby, create a pathway for the realisation of the AU Agenda 2063.

The Advantages of Educating the Disenfranchised Population

1. Ensures that education as an all-inclusive provision reaches everybody, including the disenfranchised population
2. Children of school age will not miss the mandatory age of going to school
3. Learners are exposed to the effective use of modern technology
4. Opportunity to seek a job after completion of the programme of study
5. Enhances career development
6. Reduce/prevent the tendency of terrorism among the children and youths who would have become terrorists if not educated
7. Beneficiaries can contribute to the economy of society
8. Prepare the beneficiaries to grow into becoming responsible adults
9. Enhances the development of innovative and creative ideas in the African society
10. Presentation of an innovative idea
11. Become the owner of a farm or an entrepreneur
12. Have clear proof of demonstrable knowledge of entrepreneur i.e. start a farm, small factory, and readiness to proceed for further education
13. Proficiency/competency in a specific area of learning that is congruent with the expected learning outcome as stipulated in the learning material

Disenfranchised people can acquire knowledge and skills in areas such as agriculture, which is in line with the provision in the STISA 2024 as a strategy in response to the demand for science, technology, and innovation impact across critical sectors in Africa. The strategy is anchored on six priority areas, such as the eradication of hunger, food security, prevention and control of diseases, and wealth creation for the

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attainment of the AU Vision 2063. It is, therefore, obvious that taking education to the disenfranchised people aligns with Sustainable Development Goal 4, which, if pursued, shall improve the quality of life, access to inclusive education, and equip the people with the tools that are required to develop innovative solutions to the African problems.

Method of Learning among the Disenfranchised Population

Through the use of modern and relevant technology, learning facilities are made available at minimum cost so that learners can have access to education even in their comfort zone. People from all walks of life, including the young, old, female, male, and disenfranchised population, are thereby endeared to access education through ODL. Many countries in Africa, such as Nigeria, Ghana, South Africa, Zambia, Sudan, Tanzania, Mozambique, etc., have been identified with ODL in their higher education programmes. It is, however, glaring that none of them has been able to address the disenfranchised population in specific terms.

In addition to the use of ICT facilities, flexible methods of acquiring knowledge shall be adopted with consideration for the following:
i)   Adoption of a work and learn arrangement to make learning easy
ii)   Allowing different age groups to access education
iii)   Opportunity for an unlimited number of people to gain access to learning at the same time from different locations
iv)   Allowing learning to be self-paced, synchronous, and asynchronous
v)   Encourage individuals to make a personal choice of programme and study duration
vi)   A good relationship is created between learners and the world of work.

Needs of Learners in the 21st Century

In the design and transmission of learning content for disenfranchised people, emphasis should be placed on the needs of learners in the 21st

century to be able to enhance the acquisition of relevant knowledge and skills for solving daily human problems and meeting their daily survival needs. This is essential, since the needs of learners in ODL institutions in the 21st century will revolve around the following:

- Use of information and communication technology as a crucial tool with which to access useful information.
- Openness with the method of transmitting knowledge, which requires institutions of learning to come out of the insular mode of operation, be liberal and open to achieve effectiveness in learning activities.
- Collaboration with organisations that wish to exchange ideas and contribute to the activities of teaching and learning.
- Be able to create a mindset that would explore areas that would bring about positive and progressive change in society.
- Use of a lifelong learning approach to education for continuous improvement.
- Use of an interdisciplinary approach to acquire knowledge as opposed to emphasis on the compartmentalisation of subjects into arts/science, etc., which, for some time, has made learning redundant instead of exploring and imbibing the interrelatedness that exists among them.

The Role of Lifelong Learning in Open and Distance Education

Lifelong Learning in Open and Distance Education was created by Leslie Watkins and used by Professor Clint Taylor (Jegede, 2023). The term recognises that learning is not confined to childhood or the classroom, but takes place throughout life and in a range of situations. Allen Tough (1979) asserts that almost 70% of learning projects are self- planned. Apart from youths, most of the disenfranchised people are adults who have gone to school before and so need to be exposed to continuing education programmes. Some of these groups are dislocated because of a crisis or ostracised, like those in the correctional centres, yet they are very eager to seek knowledge and, therefore, should not be denied either because of physical distance or the unpleasant circumstances around them.

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Lifelong learning is also considered a germane pathway for encouraging the disenfranchised population to have access to learning continuously. It was reported by Nichols (2013) that lifelong learning is an approach to learning, whether in personal or professional contexts, that is continuous and self-paced. He stated that lifelong learning can be formal or informal. He also reported that it takes place throughout an individual's life, i.e., from cradle to grave. Also, O'Grady 2013 described lifelong learning as a process that includes people learning in different contexts. Interestingly, according to Tenebe and Ogidan (2017), the learning environment does not only include schools but also homes, workplaces, and even locations where people pursue leisure activities. However, while the learning process can be applied to learners of all ages, there is a focus on adults who are returning to organised learning. It was further explained by Jegede (2023) that there are programmes based on a lifelong learning framework that address the different needs of learners, such as the United Nations' Sustainable Development Goal 4 and the UNESCO Institute for Lifelong Learning, which caters to the needs of the disadvantaged and marginalised learners (Jarvis, 2009). Similarly, it encourages a mass movement where everybody has access to education without anybody left behind. It is therefore possible that, regardless of the unpleasant circumstances that may be surrounding the learners, such as poverty, crisis, or other reasons, there would be an opportunity through ODL to take education to the people who have been denied, as well as the 34 million children of primary education age in Africa who were not enrolled in school.

In a recent report, Jegede (2023) stated that ODL can be used to provide access to education for people who are far away from school. According to him, the three approaches in lifelong learning are: pedagogy, andragogy, and heutagogy. Pedagogy refers to teaching children, while Andragogy refers to all forms of adult learning based on the principle that learners possess maturity and autonomy in their learning. The third one, which is heutagogy, refers to the practice and management of self-determined learning. Similarly, lifelong learning covers a voluntary or self-motivated pursuit of knowledge for either personal or professional reasons. Therefore, lifelong learning as a

strategy in ODL enhances social inclusion, active citizenship, personal development, self-sustainability, and employability.

If properly organised, all the ACDE member institutions that are in different regions of Africa would be able to play important roles in reaching the population of people who have been denied access to education. A list of the ACDE member institutions is presented below.

Some ACDE Member Institutions in Africa

S/N	Name of Institution	Year of registration	Country	Region
1	University of South Africa (UNISA)	2005	South Africa	Southern Africa
2	Open University of Tanzania (OUT)	2005	Tanzania	East Africa
3	Egerton University	2005	Kenya	East Africa
4	Jomo Kenyatta University of Agriculture and Technology	2005	Kenya	East Africa
5	University of Rwanda	2005	Rwanda	East Africa
6	National Open University of Nigeria (NOUN)	2005	Nigeria	West Africa
7	University of Abuja	2005	Nigeria	West Africa
8	Moi University	2006	Kenya	East Africa
9	Maseno University	2006	Kenya	East Africa
10	Copperbelt University	2007	Zambia	Southern Africa
11	University of Nairobi	2007	Kenya	East Africa
12	National Teachers Institute, Nigeria	2007	Nigeria	West Africa
13	Open University of Sudan	2007	Sudan	West Africa

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14	Open University Milton Keynes, UK	2007	United Kingdom	United Kingdom
15	Zambian Open University	2008	Zambia	Southern Africa
16	Strathmore University	2008	Kenya	East Africa
17	Kenyatta University	2008	Kenya	East Africa
18	African Virtual & E-University	2008		East Africa
19	University of Zambia	2009	Zambia	Southern Africa
20	University of Zambia	2009	Zambia	Southern Africa
21	Masinde Muliro University of Science and Technology	2009	Kenya	East Africa
22	University of Southern Queensland	2009	Australia	Australia
23	Zimbabwe Open University	2010	Zimbabwe	Southern Africa
24	Mulungushi University	2011	Zambia	Southern Africa
25	Botswana Open University	2011	Botswana	Southern Africa
26	Kenya School of Law	2011		East Africa
27	Federal University of Technology, Minna.	2011	Nigeria	West Africa
28	University of Maiduguri	2011	Nigeria	West Africa
29	University of Ibadan	2011	Nigeria	West Africa
30	Anambra State University	2011	Nigeria	West Africa
	University of Lagos	2011	Nigeria	West Africa
31	Schulportals Technologies, Nigeria	2011	Nigeria	West Africa

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32	Taraba State University, Jalingo			West Africa
33	El. Neelain University	2011	Sudan	Sudan
34	University of Lusaka	2012	Zambia	Southern Africa
35	University of Swaziland	2012	Swaziland	Southern Africa
36	Zambian College of Open Learning (ZAMCOL)	2012	Zambia	Southern Africa
37	Open University of Mauritius	2013	Mauritius	Southern Africa
38	Plasma University	2013	Somalia	East Africa
39	Catholic University of Mozambique	2014	Mozambique	Southern Africa
40	ISCED, Beira	2014	Mozambique	Southern Africa
41	Tumaini University Dar es Salaam College (TUDARCO)	2014	Tanzania	East Africa
42	Commonwealth of Learning	2014	Canada	Canada
43	Moddibo Adama University of Technology, Yola	2014	Nigeria	West Africa
44	Laweh Open University College	2016	Ghana	West Africa
45	Cavendish University, Zambia	2017	Zambia	Southern Africa
46	Zambia Centre for Accountancy Studies University	2019	Zambia	Southern Africa
47	Universidade Licungo, Mozambique	2019	Mozambique	Southern Africa
48	Institut Universitaire des grandes ecoles des Tropiques	2019	Cameroon	Central Africa
49	Open University of Kenya	2023	Nairobi	East Africa

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Each of the ACDE member institutions listed above is strategically located in each of the five regions in Africa. The institutions are also known to be capable of rendering services in the area of disseminating learning to the disenfranchised population. It is also noteworthy to state that the Pan-African Virtual and E–University, which was established by the African Union, is a member.

Challenges

The need for human, material, and financial resources to ensure the actualisation of taking education to disenfranchised people is obvious. Verduim & Clark (1991) argued that the use of innovation in ODL, such as taking education to the disadvantaged group of people, would demand both human and material resources for implementation. Siaciwena (2013) had also mentioned that many innovative ideas in ODL did not consider the complexities and variety of resources that would be needed to put them into use. In view of this, it would be helpful for all the stakeholders, such as the government in each country, to work with higher education institutions to be able to identify challenges and consider how to mitigate them while using ODL to take education to the disenfranchised population in Africa.

Suggestions for Actualisation

Globally, the kind of aspirations and challenges to be faced in a bid to take education to the disenfranchised will determine the kind of innovation that would emerge in such a process. It is in view of this that we suggest that a project can be created from this by the following organisations:

1. The African Union Commission, through its various organs such as the Continental Education Strategy for Africa (CESA), can create a funded project that would be implemented through the ministries of education in each African country. The governments of each country, through their ministries, should be a driving force for the implementation of the effort of taking education to the disenfranchised population. Once the

government of each country buys into it and the right people are made to coordinate it, it will be possible to engage each higher education institution to embark on the task of transmitting knowledge through the ODL to the disenfranchised population, regardless of location in Africa.

2. The African Council for Distance Education (ACDE) should carry out further exploration and make a strong request to the African Union Commission. It will not be difficult to make such a request since the ACDE has been an important partner of the AUC since 2010. Once the request is granted, it will be able to work with the designated organ of the AUC and each ACDE member institution for the actualisation of taking education to the disenfranchised population in Africa

Conclusion

Though there is no denying the fact that Africa is lagging behind the developed nations of the world in terms of education, employment, economy, and infrastructure, there are assurances that the gap can be reduced if the disenfranchised population has access to education using ODL. Similarly, taking education to the disenfranchised people will produce human resources who possess core values and aspirations that align with the vision of the African Union to produce the African continent we want by 2063 in terms of ensuring that people acquire competencies, skills, innovation and creativity, which are the normal requirements of the labour market at the national, sub-regional, regional and continental levels

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References

Jarvis, P. (2009). *The Routledge International Handbook of Lifelong Learning*. Oxon: Routledge. p. 310. ISBN 978-1-135-20253-8.

Jegede, O. J. (2021). Recalibrating Open Distance Education & E-Learning for Resilient and Inclusive Education. Being an Invited Presentation at the University of Lagos Distance Learning Institute International Colloquium, 16 September, 2021.

Jegede, O. J. (2021). The Open School Programme. Being an Invited Presentation on Open Schooling Programme in Nigeria to the Quarterly Meeting of UBEC Management with The Executive Chairmen of SUBEBs in Nigeria with the Theme: *Enhancing Access, Equity and Standards in Basic Education Through Technology-Driven Initiatives* held at the Golden Tulip Hotels Benin City, Edo State from Monday, 15 to Thursday, 18th November 2021.

Nichols (2013). What is Lifelong Learning, and Why Should you Turn Employees into Lifelong Learners? https://360learning.com/guide/learning-theories/lifelong-learning/

Noguchi, F., Guevara, J. R., Yorozu, R. (2022). Communities in Action. Lifelong Learning for Sustainable Development Fumiko Noguchi Jose Roberto Guevara Rika Yorozu. UNESCO Institute for Lifelong Learning ISBN :978-92-820-1197-3

O'Grady, A. (2013). *Lifelong Learning in the UK: An introductory guide for Education Studies*. Oxon: Routledge. ISBN 978-1-136-34095-6.

Oliveira, C. A. P. (2023). Lifelong Learning and Social Policies in Healthcare and Health Education. Paper presented at the Retridol 2-day Guest lecture & Roundtable discussion in commemoration of RETRIDOL @ 20, NOUN Abuja.

Paice, E (2023). "Youthquake: Why African Demography Should Matter to the World." Africa Research Institute in London.

Siaciwena (2013). Capacity building in ODL research. Presentation at COL/ACDE research workshop Training for Senior academics if ACDE member institutions held at Arusha Tanzania 16-17 June, 2013.

Tenebe, V. A. & Ogidan, R. J. (2014). Emerging trends in the use of social media for effective online teaching and learning in the 21st century. Lecture delivered at the global distance learning congress, Taj Lands End, Mumbai, India, on 28th June, 2014.

Thatch & Murphy (1994) Thach, L. & Murphy, L. (1994). Collaboration in Distance Education: from Local to International Perspectives. *The American Journal of Distance Education*, 8 (3), 5-21.

UNESCO (2016). Recommendation on Adult Learning and Education: 2015. Available at: <https://unesdoc.unesco.org/ark:/48223/pf0000245179/PDF/245179eng.pdf.multi> [Accessed 24 March 2021]

UNESCO (2017a). Education for Sustainable Development Goals: Learning Objectives. [online] Paris: UNESCO. Available at: <https://unesdoc.unesco.org/ark:/48223/pf0000247444/PDF/247444eng.pdf.multi> [Accessed 21 February 2022].

UNESCO (2022). UNESCO's *Fifth Global Report on Adult Learning and Education* (*GRALE 5).* at the Seventh International Conference on Adult Education in Marrakech, Morocco. 15 Jun2, 2022.

United Nations (2019). International Migrant Stock 2019: Ten Key Findings. Available at: <https://www.un.org/en/development/desa/population/migration/publications/migrationreport/docs/MigrationStock2019_TenKeyFindings.pdf> [Accessed 24 February 2022]

United Nations (2021). Global Indicator Framework Adopted by the General Assembly in A/RES/71/313 (annex). Available at:<https://unstats.un.org/sdgs/indicators/Global%20Indicator%20Framework%20after%202021%20refinement_Eng.pdf> [Accessed 24 February 2022