Sustainable Development Goal 4: Quality Education and Lifelong Learning

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Theoretical introduction of the fourth sustainable development goal: Quality education, in particular, lifelong learning.

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Background: from MDGs to SDGs

MDGs: 2000 – 2015: focus on needs of the world's poorest

SDGs: 2015 – 2030: universal, inclusive

17 goals, 169 targets – interconnected

Three pillars: economic, social and environmental

Driving principles: reducing poverty and hunger, improving health and well-being, creating sustainable production and consumption patterns

Libraries' role: contribute to the achievement of each of the pillars by providing quality education and lifelong learning

The importance of education as an SDG

SDG 4: 'Achieving **inclusive and quality education for all** reaffirms the belief that **education is one of the most powerful and proven vehicles for sustainable development**. This goal ensures that all girls and boys complete free primary and secondary schooling by 2030. It also aims to provide equal access to affordable vocational training, to eliminate gender and wealth disparities, and achieve universal access to a quality higher education.'

- … ensure equal access for all women and men to **affordable and quality technical, vocational and tertiary education**, including university
- … substantially increase the number of **youth and adults who have relevant skills**, including technical and vocational skills, for employment, decent jobs and entrepreneurship
- … eliminate gender disparities in education and ensure **equal access** to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations
- … ensure that all youth and a substantial proportion of adults, both men and women, achieve **literacy and numeracy**
- … ensure that all learners acquire the **knowledge and skills needed to promote sustainable development**, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development

Lifelong learning

Lifelong learning can be defined as all purposeful learning activity undertaken on an ongoing basis with the aim of improving knowledge, skills and competence. It contains various forms of education and training, formal, non-formal and informal, e.g. the traditional school system from primary to tertiary level, free adult education, informal search and training, individually, in a group setting or within the framework of social movements. (Häggström 2004: 2)

Three themes (Mahoney 2017) :

1. **Economic**
   a. supported by UN's SDGs
2. **Learning throughout life**
   a. individual empowerment, personal fulfillment;
   b. not easily measurable
3. **Information literacy**
   a. 'core, basis, prerequisite, or enabler'

'a process that results in personal growth and contributes to a full life'

'continual, curiosity, desire, and motivation'

Why lifelong learning is necessary

adequate lifelong learning initiatives are needed because, in a more uncertain world, workers will likely find themselves at a higher risk of displacement if their skills no longer match the demand of the labour market. (OECD 2016)

Economic perspective: sustainable development requires skilled workers, particularly true in the global knowledge economy.

Individual perspective: coping with a changing environment and remaining relevant

Drivers of change:

a. Technological change
b. Globalisation
c. Longer working lives

Library users:

○ Students and distance learners
○ Researchers (students and staff)
○ Visitors
○ Outreach communities
○ Library staff

How libraries can promote lifelong learning

facilitate learning and **inculcate a desire to learn**

- ❖ Teach information literacy
- ❖ Provide access to (increasingly digital forms of) information
- ❖ Provide requisite ICT infrastructure
- ❖ Provide ICT support
- ❖ Provide an enabling environment that is conducive to learning – quiet study as well as interaction
- ❖ Facilitate the use of OA, including OERs and MOOCs
- ❖ Disseminate OA (Green, Gold, Diamond/Platinum, and RDM)
- ❖ Digitisation
- ❖ Outreach
- ❖ Communities of practice – participate and develop
- ❖ Staff development
- ❖ Promote reading

How DUT Library promotes lifelong learning

Sean Carte, Durban University of Technology, South Africa

DUT Library projects

- ➢ Environment
- ➢ Access and discovery
- ➢ ICT infrastructure
- ➢ ICT support

- ➢ Information literacy training
- ➢ Dissemination (OA, RDM, digitisation)
- ➢ Collaboration
- ➢ Community outreach

Open Access dissemination

DUT Open Scholar: 2007-2019

- content: 1,919 ETDs and 997 research articles (722 fulltext)
- statistics: visits and downloads

Limitations of DSpace

HKU's DSpace-CRIS project

4Science and the NRF DSpace-CRIS workshop

- Researcher-oriented
- ORCID integration
- RDM through CKAN integration

ORCID integration

ORCID

- Open Researcher and Contributor ID
- 'transparent and trustworthy connections between researchers, their contributions, and affiliations'
- disambiguation

Integration

- authentication
- authority control
- synchronisation

Benefits for lifelong learning

- discoverability

Research Data Management

documentation, curation and preservation of data generated during research

- the sharing of data with other researchers,
- making it possible to build on and verify existing research,
- long-term preservation of data, and
- meeting the requirements of funding agencies and publishers

CKAN

Benefits for lifelong learning

- research output and research data in the same place
- convenience
- discoverability

Conclusion: challenges and opportunities

Open Access

Free Open Source Software

Sustainability

Collaboration

Lifelong learning opportunities

Future possibilities

Role of LODLC E-Library in Promoting Distance and Lifelong Learning

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The Social Library Supporting Distance and Lifelong Learning

- Role of Technology in Distance and Lifelong Learning

- Library Services for Distance and Lifelong Learning

- Library Services for Distance and Lifelong Learning @ LODLC

- Databases Accessed at LODLC E-Library

- The Social Library: LODLC E-Library and Social Media

- Advocacy for Open Access and Institutional Repository

- Conclusions: Challenges and Opportunities

Technology Bridging the Gap between Learners and Academic Components


Library Services for Distance and Lifelong Learning

- Distance and Lifelong Education - Taking Library Services to Users

- New Strategies for Quality Library and Information Support Services

- Partnering to Deliver Information and Instructions

- Information Literacy Instructions and Implementing Information Policy

- Creating Information Access Tools

- Reference and Research Assistance

- Remote Access to Databases

- Course Reserves

- Submission of Course Resources by Facilitators

Databases Accessed at LODLC E-Library

S/N	NAMES OF DATABASE
1	AGORA
2	NIGERIAN VIRTUAL LIBRARY
3	EBSCOHOST
4	BENTHAM-DIRECT
5	SCIENCE DIRECT
6	HINARI
7	BIO ONE
8	TEAL
9	DOAJ
10	ICRISAT
11	OARE

12	VIRTUAL LIBRARY
13	FREE MEDICAL JOURNALS
14	E-JOURNALS
15	PUBMED CENTRAL
16	JSTAGE
17	AFRICAN JOURNALS ONLINE
18	BIOMED CENTRAL
19	BOOK SPOT
20	INTERNET PUBLIC LIBRARY
21	ERIC-EDUCATIONAL LITERATURE
22	E-BOOKS & JOURNALS (MORE THAN 2 MILLIONS)
23	SCIELO BRASIL-THE SCIENTIFIC ELECTRONIC LIBRARY ON LINE

24	BIOLINE INTERNATIONAL
25	FULL TEXT JOURNALS IN CHEMISTRY
26	MICROBS
27	IAENG JOURNAL OF COMPUTER SCIENCE
28	IAENG JOURNAL OF APPLIED MATHEMATICS
29	JOURNAL OF ENVIRONMENT & EARTH SCIENCE
30	SCIENCE PUBLICATION
31	JOURNALS IN THEORETICAL COMPUTER SCIENCE
32	ECANCER MEDICAL SCIENCE
33	INDIAN JOURNAL OF SCI & TECH
34	ACADEMIC JOURNAL

Use of Social Media by LODLC E-Library

FACEBOOK

WHATSAPP

OA & IR

MAKE YOUR RESEARCH VISIBLE
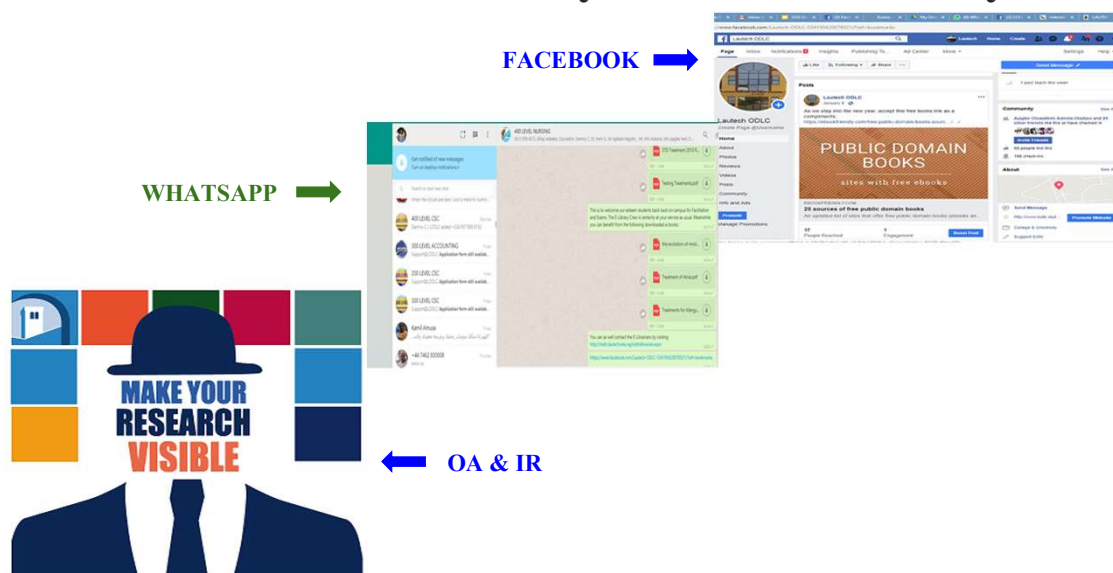
Conclusions: Challenges and Opportunities

- Lack of commitment and cooperation - Faculty Members

- Awareness and Low IL Skills - Learners

- Low Commitment Level - Management

- The IR Promise and OSS

- The Social Media Promise

- OER and MOOCs

ROLE OF LIBRARIES IN QUALITY EDUCATION AND LIFELONG LEARNING IN UGANDA

Jane Nangonzi, Kyambogo University, Uganda

Kyambogo University
Knowledge and Skills for Service

Introduction

- For any nation to develop, it needs to have and provide relevant, uptodate and adequate information on food security, democracy, health, education, gender equality etc.(Achitabwino, P. 2007).

- Libraries and librarians have evolved to become facilitators of information and lifelong learning. They emphasise service, identify user needs and communicate solutions (Makotsi, 2004).

- Libraries are crucial to the development of educational skills through the provision of physical and intellectual access to the information resources which are vital for learning (AASL, 2012).

- The library ensures public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements.

Role of libraries on lifelong learning: Uganda

- The National Library of Uganda provideds ICT training specifically designed for female farmers to access weather forecasts, crop prices, and to set up online markets in their local languages.

- Malaika Mobile Library, launched the mobile library on a Motorbike Taxi, known as Boda Bodas, with the aim of delivering books to subscribers. This development has improved the reading culture of Ugandans (Byaruhanga, 2016).

Role of libraries on lifelong learning: Uganda cont..

- Libraries repackage scholarly information to print format; e.g. Uganda Health Information Digest, repackages scholarly information in print format for health workers who would not otherwise have access to online information . (Musoke, 2014), abstracts on Topical diseases and health issues, of up to date information on disease outbreaks e.g. Hepatitis, Ebola, Cholera etc.

- Champion adult literacy and education through identification and stocking post-literacy reading materials.

Role of KYU Library on lifelong learning

- KYU library conducts workshops and trainings for students and grass root teachers of LIS as a strategy of strengthening information literacy.

Coordinating Book Aid International

- Distribution of books and coordinating libraries of affiliated institutions (PTC, NTCS and educational institutions)

Role of libraries in lifelong learning cont...

- Provide an enabling environment – conducive to users.

- It has got the required literature that facilitates learning, teaching research, for all theoretical and practical courses.

- It has got ICT facilities that enables internet access and online studies.

Role of KYU Library continued

- KYU Lib has got a well stocked section with Assistive Technology tools for students with special education needs.

- The Library is digitising its knowledge repository and this is enhancing virtual learning and research activities at the institution.
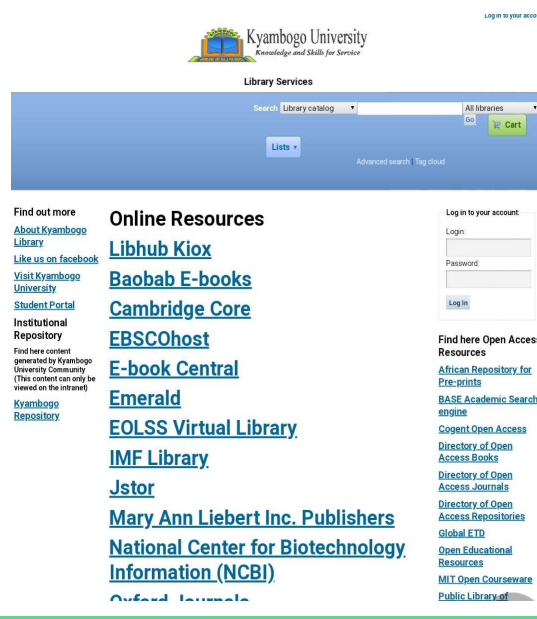
Challenges and Recommendation

Challenges

- Insufficient Funding

- Network problems and power breakdown

- Band width

- Centralized system of management.

  Recommendations

- Library orientation should be supported by other faculty heads and all other staff
- Promotion of lifelong learning, knowledge and skills transfer should be encouraged.
- Information literacy should part of the curriculum.

Conclusion

- Libraries should appreciate the fact that they are indispensable in the provision of information for the attainment of Quality education and lifelong learning

- They should therefore be in the forefront in their activities and services that contribute to the achievement of the goals.

- Libraries need to be adequately supported in the form of provision of space and financial resources.

- Adequate staffing in terms of number and professional qualification needs to be considered.

Thank you Kyambogo University
Knowledge and Skills for Service

University of Johannesburg Library in support of quality education and Lifelong learning

Christina Mafumana, University of Johannesburg, South Africa

Introduction

•**UJ mission**: inspiring its community to transform and serve humanity through innovation and collaboration in pursuit of knowledge

•**UJ Library mission**: to support, facilitate and develop teaching, learning and research by providing equitable and optimal access to information resources, creates environment that promotes information literacy and lifelong learning; fostering partnership through collaboration and cooperation, being innovative and using the latest technology.

•Libraries are the institutions in the society that assist citizens to have access to information, education, research and promotes social cohesion.

•Libraries enable people to have access to ICT and it is the agent of change and heart of the institution and community

•The goal of lifelong learning is the fulfilment of the adaptive and creative functions of individuals leading to the continuous improvement of the quality of life.

•Library is a gateway to the world of knowledge that breaks the knowledge boundaries

•Education empowers people and liberates societies

South African government strategies and NDP 2030

Basic education
- Basic human right that paves way for other rights
- Breaks the cycle of poverty and supports development
- Build new schools with smart technologies
- ECD, foundation, intermediate and senior phase compulsory (12 years of schooling)
- Quality teachers – quality education
- Improve access to free and quality education
- Kha Ri Gude for illiterate adults- self help skills- bank account opening
- NDP to increase success rate of learners taking STEM subjects and improve teacher capability
- Education improves literacy, numeracy and reading

Higher education
- DHET subsidise 26 Universities and 50 TVET colleges
- Build new universities and colleges
- Train the teachers and academics
- Fundza Lushaka train and produce qualified teachers
- USAF(Universities South Africa); quality teaching take place in institutions, adequate resources allocated, deserving students to gain access regardless of background, universities to play a role in economy and social development
- NDP believes that by 2030 SA should have access to education and training of the highest quality

UJ strategies to support teaching and learning

• Mobile devices were introduced at UJ in 2014 as compulsory for all undergraduate NSFAS recipients before 2015 #FeesMustFall

• Each student has access to 20 GB data per month and WiFi is available in all 4 campuses

• Lecture venues are equipped with data projectors

• Students are allowed to bring their own mobile devices; laptops, smartphones, tablets etc

• All registered students have R150 photocopying and printing allowance

• Focus on blended learning using Blackboard as virtual learning environment which is password protected

• More or less 4000 seats in the computer labs across UJ campuses

• Technology support training for students, academics and support staff offered by Centre for Academic Technologies and IT department

Library Services and facilities

•Sierra- integrated library management system including the catalogue

•UJoogle-UJ Library customised Google. One search finds it all: articles, journals, magazines, books

•UJContent- research output, past examination papers and special collections

•Library webpage- is used as a communication tool and to update newsworthy information and upcoming events.

•Disability lab in the library to embrace students with disability with assisted technologies

•Library and faculty tutors to further support the students beyond the classroom

•Reading Corner – for the love of reading

. WI-FI connection for mobile devices

. Web tools like Facebook, Twitter, e-mail and other social medias have an impact on academic library environment

Learning Commons- Undergraduate support

. Library orientation and Information literacy

•Providing access to computer and unlimited internet use

•Time management system- used across campuses, students scan their cards on the big screen to be allocated 45 minutes to use a PC

•Create online training modules with lots of self-help material (videos and podcasts)

Research Commons-Postgraduates and academics

• State of the art computer workstation with internet access to collaborate and connect with fellow researchers and academics

• Trainings, workshops and seminars by IR manager, FL and RL

• Research skills and capacity development

• Referencing: Refworks and Mendeley

• Libguides- Faculty library guides

• UJ institutional repository- open access research output

• Researcher profile tools; ORCID, scopus and Google scholar

• Finding accredited journals, journal impact factor, tracking citations

• Collaborate with Research Office and Post Graduate School on various research associated topics

UJ and the 4th Industrial Revolution

• In October 2018 the UJ Library hosted a Colloquium on 4thIR and conference will be in October 2019

• UJ VC - champion of 4IR. Collaborates with Wits, FH and Telkom to develop 4IR plan for SA

. Africa be part of 4IR not be consumers and build the Africa we want. Review HE curriculum

• New library initiatives; book to desk for academics, mobile work list, self check machine, monthly discusions on 4IR

• UJ Library Tasks teams for its staff to be skilled, reskilled and up skilled for new skills and opportunities

. Makerspace (DFC) and QR Codes (APK), Community engagement/outreach programmes

New coming projects: chatbot, library app, ebsco alerts for researchers, RDM (figshare), RFID book drop box

Library staff development

• Library staff can study for free up to PHD

• Library training academy for in house training and internship on specialized areas not offered by the university

• Human Resources short courses; emotional intelligence, computer literacy

• Library professional bodies like LIASA also give trainings on new library trends and developments

Recommendations

• Information literacy need to be part of the curriculum

• Compulsory library orientation and information literacy

• Intensive Research needs to be done on 4th IR and its technologies in the library

. Compulsory to upload research output increase ranking, funding (NRF), reputation, citations and body of knowledge

Conclusion

• Library needs education and education needs library to survive

• The Sustainable Development Goals are universal agenda for transforming the world through the use of libraries

• Technology infrastructure, knowledgeable and engaged staff are important for achieving vision 2030

• To promote lifelong learning knowledge sharing and skills transfer should be encouraged

• Quality education can bridge digital divide through the promotion of lifelonglearning and self development

.Industries and academic institutions are not yet ready for 4th IR due to lack of relevant skills

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Thank you very much!

Ndiyabulela kakhulu!