



PARALLEL SESSION SCHEDULE & ABSTRACTS

PCF8

PAN-COMMONWEALTH FORUM

OPEN, ONLINE AND FLEXIBLE LEARNING: THE KEY TO SUSTAINABLE DEVELOPMENT

27 - 30 NOVEMBER 2016
KUALA LUMPUR CONVENTION CENTRE

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PARALLEL SESSION OVERVIEW

PARALLEL SESSION OVERVIEW					SESSION 1-5: Room Allocation for Sub-themes		
SESSION ROOM	Monday 1 12:00 - 13:00	Monday 2 15:30 - 16:30	Monday 3 16:30 - 17:30	Tuesday 4 11:00 - 12:00	Tuesday 5 12:00 - 13:00		
Meeting Room 302 - 303	Inclusion Strategies for Persons Who Are Differently Abled	ODFL for Improving Access in Technical and Vocational Education & Training (TVET)	ODFL for Improving Access in Higher Education	PACFOLD	Effective Learning Outcomes 2		
Meeting Room 304 - 305	OER in the Commonwealth	ODL for Gender Inclusivity					
Meeting Room 406 - 407	ODL and Accessibility	Effective Learning Outcomes 1					
Meeting Room 408 - 409		ORELT: Open Resources for Improving Learning Outcomes					
Conference Hall 3	Gender Issues in Equitable Access to Quality Education	Case Studies: Institutional & Personal Experiences 1	Case Studies: Institutional & Personal Experiences 3	ICTs & eLearning 1	ICTs & eLearning 2		
Plenary Hall		Case Studies: Institutional & Personal Experiences 2	Case Studies: Institutional & Personal Experiences 4				
Conf Hall 1		Impact of ICT Applications in Teaching and Learning	Journal of Learning for Development: Authors' Workshop				
Meeting Room 410	Design, Development & Impact of online Learning	Design, Development and Acceptance of Mobile Learning	Fostering Community of Practice for Leadership & Change	Emerging Technologies & Innovations for Teaching & Learning	Adoption of OER for Teaching & Learning		
PARALLEL SESSION OVERVIEW							
SESSION ROOM	Tuesday 6 14:00 - 15:00	Tuesday 7 15:00 - 16:00	Wednesday 8 11:00 - 12:00	Wednesday 9 12:00 - 13:00	Wednesday 10 14:00 - 15:00		
Meeting Room 302 - 303	ODVL for Increasing Access in Continuing Professional Development (CPD)	MOOCs for increasing Access to Learning	Policy to Support Increasing Access	Barriers to Increasing Access			
Meeting Room 304 - 305			Strategies for increasing Access				
Meeting Room 406 - 407	Effective Support Systems for ODL1	Viable Delivery Models in ODL 3	ODL for Effective Skills Development	Effective Support Systems for ODL 2			
Meeting Room 408 - 409	Possible Ministerial Roundtable		Virtual university Small States of the Commonwealth (VUSSC): A Model for Collaboration				
Conf Hall 3	Open & Flexible Learning in Developing Contexts 1		Open Education Licensing Policies for Government and Institutions				
Plenary Hall	Open & Flexible Learning in Developing Contexts 1		Transformation of Institutional Practices Using OER	Case Studies on Open Educational Resources			
Conference Hall 1	Social Media in Education	Technology and Engagement in Massive Open Online Courses	Design and Development of Online Learning Applications	Innovative Use of Mobile Devices and Apps			
Meeting Room 410	COL Technology-Enabled Learning Panel	Perspectives in Online Learning: From Design to Quality Assurance					
Exhibition Hall					Poster Session		

Monday November 28 | PARALLEL SESSION 1

ACCESS & INCLUSION					
Room 302 - 303		Monday 12:00 - 13:00		Parallel Session 1	
Inclusion Strategies For Persons Who Are Differently Abled Persons who are differently abled face particular challenges when seeking educational opportunities because they require additional support. What strategies, technologies and approaches been utilized to promote inclusion in both formal and non-formal education and learning?					
Facilitator		Prof Elifas Bisanda	Rapporteur	Assoc Prof Rajiah Binti Rahim	
Paper ID	Title		Presenters	Institution	Country
174	Designing Accessible MOOCS for People with Visual Impairments in An African Context		Dr Sindile Amina, Ngubane-Mokiwa	UNISA	South Africa
509	Effectiveness of Digital Games for Inclusive Education- A Case Study of Learners with Intellectual Disability		Dr M Rajesh, Dr Sindhu P Nair, Jalajakumari V T		India
147	Accessibility and Quality Education of Persons with Disabilities in India: An Open Schooling Perspective		Sukanta Kumar Mahapatra	NIOS	India
189	Promoting Learning for Persons with Disabilities Through the Use of Inclusive Technologies		Sasae Walter	NUS	Samoa

Room 304 - 305		Monday 12:00 – 13:00		Parallel Session 1	
OER in the Commonwealth This session will introduce the latest COL report titled <i>Open Educational Resources in the Commonwealth 2016</i> . The presenters will highlight the current state of play with respect to OER in the Commonwealth and explore the research report regarding the status of OER in Asia and Africa.					
Facilitator	Dr Ishan Abeywardena	Rapporteur	Dr Sishi Kumar A/L Piaralal		
	Title	Presenters	Institution	Country	
	Commentary on the report from an Asian Perspective	Prof Ariadurai	OUSL	Sri Lanka	
	Commentary on the report from an African Perspective	Dr Catheryn Ngugi	OER Africa	South Africa	

EFFICIENCY & EFFECTIVENESS					
Room 406 - 407		Monday 12:00 - 13:00		Parallel Session 1	
ODL and Accessibility		One of the principal reasons for the growing interest in ODL is its capacity to increase access to education. However, a lot of questions have been raised about ODL's efficiency and effectiveness in addressing learners' problems, retaining students and ensuring higher completion rates. This session focuses on how different Universities have addressed these issues and lessons being learnt.			
Facilitator	Dr Cosmas Mnyanyi		Rapporteur	Dr Hana Simpassa	
Paper ID	Title		Presenters	Institution	Country
472	Harnessing The Power Of Loyalty To Attract And Retain Students: An OUM Experience		Kamariah Mohd Noor, Afzhan Khan Bin Mohamad Khalil	Open University Malaysia	Malaysia
279	A Diagnosis Of Learner - Problems In B.A. (Hum.) Programme Offered By Institute Of Distance Education, Univ. Of Swaziland, Swaziland		Prof Dr Satish Rastogi	University Of Swaziland	Swaziland
93	Analysing Education Policies for the Future: Realising the Vision of Open Distance Learning 2030		Prof Dr Mpine Makoe	University of South Africa	South Africa

QUALITY & EQUITY IN LEARNING					
Conference Hall 3		Monday 12:00 - 13:00		Parallel Session 1	
Gender Issues in Equitable Access to Quality Education This session interrogates issues of gender with particular reference to equitable access to quality education. Experiences are shared and practitioners are challenged to find ways which are gender responsive and contribute towards enhanced provision of equitable and quality education for sustainable livelihoods.					
Facilitator	Prof Dr Siti Aishah Hashim Ali		Rapporteur	Dr Caroline Kamni A/P Thangiah	
Paper ID	Title		Presenter	Institution	Country
138	Improving the quality of education through the use of gender-sensitive student councils: experience from five selected districts in Tanzania.		Dr Godfrey Mnubi	Institute of Adult Education	Tanzania
505	Gender based inequalities in learning for mitigating disaster risk in Bangladesh: How ODL can help?		MD Abdus Sattar	Bangladesh Open University	Bangladesh
364	How community engagement and local community organizations contribute to equitable participation of out of school girls affected by CEFM?		Frances Ferreira Prof Mostafa Azad Kamal	COL	Canada
373	Theater for development a means for dialogue with the ultra-poor		Gladson Makowa		Malawi

TECHNOLOGY & INNOVATION					
Room 410 Session 1		Monday 12:00 – 13:00		Parallel	
Design, Development and Impact of Online Learning This sessions shares research on online learning, and focusses on designing of both fully online and blended learning opportunities taking user feedback and satisfaction.					
Facilitator	Cheryl Lee Brown	Rapporteur	Lilian Charles Mutalemwa		
Paper ID	Title	Presenters	Institution	Country	
230	A Hybrid E-Learning Model in a Localized Environment	Moiz Uddin Ahmed Siddiqui	Allama Iqbal Open University	Pakistan	
242	Development of Interactive Online Learning Modules: Lessons from Kenyatta University, Kenya	Elizabeth Mwaniki, Samwel Njihia, Fatuma Chege, Anthony Ireri	Kenyatta University	Kenya	
557	Motivation, Experience and Satisfaction Among Adult Learners With Fully Online Web-Based Courses	Raemah Abdullah Hasim, Nuruljannah Musa, and Zulaika Zakariah	Open University of Malaysia	Malaysia	
282	Technology Induced Innovation in Teaching and Learning System of Bangladesh Open University: A Shift of Paradigm	Khondoker Mokaddem Hossain	Bangladesh Open University	Bangladesh	
269	New Media Trends Among OD Students in Pakistan and their Impact on Learning	Shahid Hussain	Allama Iqbal Open University	Pakistan	

Monday November 28 | PARALLEL SESSION 2

ACCESS & INCLUSION

Room 302-303		Monday 15:30 – 17:30		Parallel Session 2/3	
Open, Distance & Flexible Learning for Improving Access in Technical & Vocational Education and Training (TVET)					
Whilst there has been some progress made many organisations and institutions in the Commonwealth are still grappling with issues of how to improve access and to include those who are disadvantaged and marginalised. Open, flexible and online learning approaches have been used to alleviate these challenges throughout the Commonwealth. This session explores how this is being done in TVET institutions and NGOs.					
Facilitator	Prof George A. Papadopoulos		Rapporteur	Dr Shokahle Dlamini	
Paper ID	Title	Presenters	Institution	Country	
184	Accelerating Sustainable Development Through Flexible Learning: Re-Orienting Entrepreneurship Education	Agnes Rono, Edwin Tarno, Abdi Tiony	RVTTI	Kenya	
119	A Tracer Study on Technical and Vocational Education Training (TVET) Graduates from Koforidua Polytechnic, Ghana.	Buckman Akuffo, Dr Samuel Okae-Adjiei, Prof Smile Dzisi	Koforidua Polytechnic	Ghana	
475	Facilitating Competency Based Skills Training Through Technology Assisted Course Materials in Bangladesh	Shahnewaz Khan	DAM	Bangladesh	
250	OERs in a Competency Based Environment: Fostering Access and Inclusion	Michael Coghlan, Emmanuel Garasivi	MoET	Vanuatu	
326	Offering TVET College Lecturers Increased Access to Professional Qualification Programmes Through a National Open Learning System In South Africa	Michael Adendorff, Christina Van Wyk	Directorate of Higher Education	South Africa	

Room 304-305			Monday 15:30 – 17:30		Parallel Session 2-3	
Open, Distance & Flexible Learning for Gender Inclusivity						
Gender is an obvious case for discrimination and marginalization in education. In this session we consider a range of different approaches to improve learning opportunities for girls and women, including boat schools, flexible TVET, girlpower, career advancement and gender in technology.						
Facilitator	Prof Faridah Hashim		Rapporteur	Assoc Prof Dr Aishah Binti Ali		
Paper ID	Title	Presenters	Institution	Country		
54	Open and Distance Learners’ on the Factors Affecting Women’s Career Advancement	Chooi Chea Chiam	OUM	Malaysia		
344	Girlpower	Kaprie JG Thoronka, Paul A Bangura		Sierra Leone		
333	Making Learning More Accessible for Women: The Practitioners’ Viewpoint	Dr Anita Priyadarshini	IGNOU	India		
371	Strategies to Enhancement of Female Learners’ Access into Science Engineering and Technology (Set) Courses: Case of Marine Engineering Students in Mombasa Technical Training Institute.	Ann Polly Kithinji	Mombasa Technical Training Institute	Kenya		
538	Empowering Girls’ Through ODL System of Education: A Case Study	Dr Verlaxmi Indrakanti, Assoc Prof Satyanarayana Rao Indrakanti		India		
329	Increasing Women’s Access to Technical Education: A Study of Public Technical Institutions in Kiambu County, Kenya	Pauline Chege, Jeff Kariuki	Thika Technical Training Institute	Kenya		
541	Solar-Powered Floating Schools in Flood-Prone Bangladesh: An Inclusive and Sustainable Solution Towards Greater Equality	Mohammed Rezwan	Floating School	Bangladesh		
546	Gender, Skill Development and Employability: The Context of Open and Distance Learning Perspective in India	Bijaylaxmi Mohapatra, Sukanta Kumar Mahapatra	NIOS	India		
331	Technology mediated teaching/learning as a pathway to inclusive higher education for sustainable development: what are the pending gender issues?	Dr Bantu Lulu K Morolong Sukanta Kumar Mahapatra	BOCODOL	Botswana		
347	Girlpowerempowerment	Mutale M Kapyanga	ChildHelp Inc	Zambia		
350	Gendered Micro Politics: Exploring the Sri Lankan ODL and Conventional Academic Systems	Dr Kanchana Bulumulle		Sri Lanka		

EFFICIENCY & EFFECTIVENESS				
Room 406-407		Monday 15.30 - 16.30		Parallel Session 2
Effective Learning Outcomes 1 One of the global concerns which is reflected in SDG 4 is achieving quality learning outcomes and different institutions are employing different strategies to do so. In this session, presenters will be sharing strategies that were used to integrate technology to ensure better learning outcomes in Biology, accounting and teacher education, and lessons learnt.				
Facilitator	Dr Moses Tenywa			
Paper ID	Title	Presenters	Institution	Country
95	Open And Distance Learning (ODL): Experiences From Biology Students Of The Distance Learning Institute, University Of Lagos	Dr Abosede Ebabhi, Olubiyo Amos	Distance Learning Institute, University Of Lagos	Nigeria
466	Correlating Students' Learning Styles And The Performance Expectancy Via E-Learning Management System	Noryati Alias, Dr Raemah Hashim	Open University of Malaysia	Malaysia
500	Student Satisfaction And Perceived Learning Outcome Of Online Courses	Prof Dr Latifah Abdol Latif, Prof Ramli Bahroom	Open University Malaysia	Malaysia
362	Teachers Taught, Lessons Learnt: Experiences Of Using Technology To Support Teacher Learning On Three Continents.	Clare Woodward, Kristina Stutchbury	The Open University	United Kingdom
112	The Quest for Professional Development on Teaching and Learning Technologies at Charles Stuart University: A Case Study	Dr Shafiqul Alam, Assoc Prof Dr Philip Uys	Bangladesh Open University	Bangladesh
Room 408-409		Monday 15.30 - 16.30		Parallel Session 2
ORELT - Open Resources for Improving Learning Outcomes English Language is used as the official language and the medium of instruction in a number of Commonwealth countries. However, in some countries, there are fears that standards have been falling partly because the children do not have effective language skills. The Commonwealth of Learning developed Open Resources for English Language Teaching (ORELT) to support teachers improve the teaching of English Language. In this session, experiences of how these resources have been used and with what results in Kenya, Tanzania and Uganda will be shared.				
Facilitator	Freda Wolfenden			
Title		Presenters	Institution	Country
ORELT Concept and learning materials		Dr Jessica Aguti	COL	Canada
ORELT in Kenya		Dr Fridah Erastus Kanana	Kenyatta University	Kenya

ORELT in Tanzania	Dr Hana Simpassa	Open University of Tanzania	Tanzania
ORELT in Uganda	Samuel Siminyu & Carolynne Seera	Makerere University & Kireka High School	Uganda

QUALITY & EQUITY IN LEARNING				
Conference Hall 3		Monday 15.30 - 16.30		Parallel Session 2
Case Studies: Institutional and Personal Experiences 1				
This session provides an exchange of experiences on quality and equity issues relating to the provision of both academic and technical education. The issues are subjected to different perspectives in terms of gaps between perceptions and expectations; access, relevance, quality of learning materials & assessment.				
Facilitator	Assoc Prof Dr Norlia T Goolamally		Rapporteur	Dr Gurcharan Singh A/L Bishen Sing
Paper ID	Title	Presenters	Institution	Country
259	Sustainable Development through ODL: The experience of KKHOU	Dr Prasenjit Das Dr Ritimoni Bordoloi	Krishna Kanta Handiqui State Open University	India
20	Instructional Design of Distance Education: Gaps between Theory and Practices at Allama Iqbal Open University (Pakistan)	Dr Chaudhary Muhammad Ajmal	Allama Iqbal Open University	Pakistan
438	Quality control measures at Institute of Distance Education, University of Swaziland, Swaziland	Prof Dr Satish Rastogi	University of Swaziland	Swaziland
411	Adapting Quality Assurance to Innovative programmes	Stamenka Uvalic-Trumbic Sir John Daniel		France Canada

Plenary Hall		Monday 15.30 – 16.30		Parallel Session 2	
Case Studies: Institutional and Personal Experiences 2 This session provides an exchange of experiences on quality and equity issues relating to the provision of both academic and technical education. The issues are subjected to different perspectives in terms of gaps between perceptions and expectations; access, relevance, quality of learning materials and assessment.					
Facilitator	Prof Dr Siti Aishah Hashim Ali		Rapporteur	Dr Caroline Kamni A/P Thangiah	
Paper ID	Title		Presenters	Institution	Country
158	Quality and equity in higher education in Sri Lanka: Case of Open University of Sri Lanka		Prof Dr Chandra Gunawardena		Sri Lanka
439	Public private partnership in health care delivery-a story from Ghana		Jeremiah Koomson		Ghana
11	The need for more activities/engagements in SLMS, a case-study for a course at Indira Gandhi National Open University		Assoc Prof D Kamalika Banerjee		India
283	A survey of students’ perception on quality of study materials of Commonwealth Executive MBA program at the Bangladesh Open University		Prof Dr Quazi Galib Ahsan		Bangladesh

TECHNOLOGY & INNOVATION					
Conference Hall 1		Monday 15.30 - 16.30		Parallel Session 2	
Impact of ICT applications in Teaching and Learning This session present a range of issue in applications of ICT and their implications for teaching and learning. From the use of video and IPTV applications to use of ICT for indigenous people, this session focuses on experiences of researchers in integrating technology in teaching and learning.					
Facilitator		Shafika Isaacs	Rapporteur	Moiz Uddin Ahmed Siddiqui	
Paper ID	Title		Presenters	Institution	Country
31	The Lines that Divide: A Study to Explore the Existence and Use of Technology and Innovative Educational Approaches to Foster Educational Progression among Indigenous Groups.		Maxine Mckay	University of Belize	Belize
219	Design and Implementation of Real Time E-Lecturing System		Fasasi Adebayo Adebari, Ibraheem Adedotun Abdul, Nureni Yekini	Yaba College of Technology	Nigeria

27	Mobile ICT Training to Rural Schools: Bridging the Gap	James Ssenabulya	Nakaseke Rural Youth Sustainable Livelihoods Initiative	Uganda
236	Conceptualization of a Video-Sharing Platform Supporting Arabic Content	Athra Alawani, Alain Senteni, Abtar Darshan Singh	Hamdan Bin Mohammed Smart University	United Arab Emirates
186	Does the Internet Protocol Television (IPTV) Have an Effect on The Accounting 2 ODL Learner's Academic Performances here in Papua New Guinea?	Panditha Bandara Bandara, Isaac Manu, Michael Pepen, Benson Sims	University of Papua New Guinea	Papua New Guinea

Room 410		Monday 15.30 - 16.30		Parallel Session 2	
Design, Development and Acceptance of Mobile Learning The growing number of mobile and smartphone users has led to increased use of mobile devices for teaching and learning. The papers in this session explores the frontiers of mobile learning from a range of issues covering design and development issues and user acceptance.					
Facilitator	Mohan B. Menon	Rapporteur	PV Suresh		
Paper ID	Title	Presenters	Institution	Country	
214	Can Mobile Learning Upgrade the Educational Status of Bangladesh: Challenges And Opportunities?	Md. Anwarul Islam, Assoc Prof Sharker Md. Numan	Bangladesh Open University	Bangladesh	
363	Acceptance of Tablet Apps for E-Learning by Senior Users: A Test of Unified Theory of Acceptance and Use of Technology	Adnan Riaz	Allama Iqbal Open University	Pakistan	
25	M-Learning: An Experience at Netaji Subhas Open University	Anirban Ghosh	Netaji Subhas Open University	India	
562	Mobile Learning –Cyber Law Course: The Application Development and Students Perceptions.	Naija Hayaati Mohd Alwi, Habibah Ismail, Fatin Munirah	Universiti Sains Islam Malaysia	Malaysia	

EFFICIENCY & EFFECTIVENESS				
Room 406-407		Monday 16:30 - 17:30		Parallel Session 3
Viable Delivery Models in ODL 1				
ODL has been employed in a various institutions using different models but a lot of questions still remain on which models work best and the conditions in which they do so. In this session, experiences from Africa and Asia will be shared on how different models have worked in reaching out to wider communities, the design and implementation strategies used, use of an online tracking system and a model for predicting completion rates among secondary school students.				
Facilitator	Leopold Katula Rweyemamu		Rapporteur	Rebecca Ojedele
Paper ID	Title	Presenters	Institution	Country
177	Uptake Of Open And Distance Learning (ODL) Programmes: A Case Of Kenyatta University, Kenya	Dr Samwel Njihia, Dr Elizabeth Mwaniki	Kenyatta University	Kenya
337	Leadership In Open And Distance Learning At The Namibia University Of Science And Technology To Ensure Competitive Advantage And Optimum Benefits	Dr Delvaline Mowes	Namibia University Of Science And Technology	Namibia
446	The Development Of A Framework Which Supports The Evaluation Of Mobile Educational Applications	Hendri Kruger Ronel Callaghan		South Africa
51	Degree Tracking System (DTS) To Improve The Efficiency And Effectiveness Of ODL System: A Case Study Of AIIOU	Hatib Shabbir Kamran Mir	Allama Iqbal Open University Islamabad	Pakistan
200	Examining The Efficiency And Reach Of Open And Distance Education For Secondary Education In India: Econometric Analysis Of Student Data From National Institute Of Open School (NIOS)	Shreekanth Mahendiran, Dr Jyotsna Jha, Padmaja Pancharatnam	Centre For Budget And Policy Studies	India
527	Openness Of The Open University Systems	Dr Rajan Sudarsan	Indira Gandhi National Open University	India

QUALITY & EQUITY IN LEARNING				
Conference Hall 3		Monday 16.30 - 17.30		Parallel Session 3
Case Studies: Institutional and Personal Experiences 3 This session provides an exchange of experiences on quality and equity issues relating to the provision of both academic and technical education. The issues are subjected to different perspectives in terms of gaps between perceptions and expectations; access, relevance, quality of learning materials and assessment.				
Facilitator	Prof Dr Wardah Mohamad		Rapporteur	Dr. Soon Seng Thah
Paper ID	Title	Presenters	Institution	Country
92	Alienation at the Open University of Mauritius: A Conceptual Framework for interpretation of learner feelings and emotions	Teenah Jutton	Open University of Mauritius	Mauritius
404	Quality of learning resources of Commonwealth Executive Master of Business Administration Programme: A Case of Bangladesh Open University	Md. Mahfuzur Rahman Prof Mostafa Azad Kamal	Bangladesh Open University	Bangladesh
537	Effectiveness of learner support services for the Namibian College of Open Learning	Heroldt Vekaama Murangi	NAMCOL	Namibia
271	Delivery of open and distance learning in Kenya: Demand and quality concerns	Dr Jackline Nyerere	Kenyatta University	Kenya
101	A comparative study on students' performance in Masai Technical Training Institute	Francis Wambua, Wesley Yegon	Masai Technical Training Institute	Kenya
442	Learners and Tutors perceptions regarding the quality of the study materials and support Services: Formulating a QA Framework For BOU	Assoc Prof Dr Sharker Md. Numan	Bangladesh Open University	Bangladesh

Plenary Hall		Monday 16.30 - 17.30		Parallel Session 3	
Case Studies: Institutional and Personal Experiences 4 This session provides an exchange of experiences on quality and equity issues relating to the provision of both academic and technical education. The issues are subjected to different perspectives in terms of gaps between perceptions and expectations; access, relevance, quality of learning materials & assessment.					
Facilitator	Assoc Prof Dr Norlia T Goolamally		Rapporteur	Dr Gurcharan Singh A/L Bishen Sing	
Paper ID	Title	Presenters	Institution	Country	
506	Strengthening student support service in ODL programmes in Bangladesh: Gaps and mitigation rules	Dr Iqbal Husain		Bangladesh	
151	Capacity building and regulations as key success factors in implementing open and distance learning programmes: A case study of Bangladesh Open University	Associate Prof. Sabina Yeasmin CRK Murthy		Bangladesh	
203	Flexible learning sine quo non in open and distance system : A case of India	Prof Laxmi Gupta		India	
134	Problems & challenges of quality assurance of ODL institutions in India	Dr Manoranjan Goswami		India	
284	Actualization of CBET in TVET education as a pathway to quality and equity in learning in Kenya	Daniel Wahungu		Kenya	
97	A case study: Performance between open and distance learners and traditional classroom-based learners	Sze Wei Loo, Chooi Chea Chiam, Mrs Raziana		Malaysia	

TECHNOLOGY & INNOVATION			
Conference Hall 1		Monday 16:30 - 17:30	Parallel Session 3
Journal of Learning for Development: Authors' Workshop			
This is a special session to promote research and publishing within the scope of the <i>Journal of Learning for Development</i> . In this session, the editorial team of the journal will focus on providing an orientation to getting published in the journal, and provide tips on how to present research findings and respond to comments from the reviewers. This session should be of interest to researchers and practitioners who wants to contribute to the growing body of literature on learning for development. We welcome you to attend this session and discuss your ideas, including the possibility of converting your PCF8 paper into a relevant journal contribution, with the editorial team. The session will follow a mix of presentations and discussion to encourage participants to consider JL4D as an option for sharing their research.			
Facilitators: Anne Gaskell, Chief Editor, JL4D, Sanjaya Mishra, Associate Editor, JL4D		Rapporteur KGH Uditha Ratnayake	
Title		Presenters	Institution
Overview of the JL4D		Sanjaya Mishra	Commonwealth of Learning
What are we looking for? How to get published in JL4D		Anne Gaskell	Independent Consultant
Why Book reviews?		Godson Gatscha	Commonwealth of Learning

Room 410		Monday 16:30 - 17:30		Parallel Session 3	
Fostering Community of Practice for Leadership and Change					
This is an interesting session that focuses on experiences of fostering Community of Practice (CoP) in different contexts. The presenters share their best practices to sustain a CoP for lifelong learning through collaboration and information exchanges using web technologies and community radio.					
Facilitator		Ian Thomson		Rapporteur Deepak Prasad	
Paper ID	Title	Presenters		Institution	Country
144	The Role of the Commonwealth Education Hub in Sustainable Development	Paul West		Commonwealth Secretariat	South Africa
361	Building a Vibrant Online Community that Transcends Geographies, Distance, Cultures and Traditions and Leveraging the Expertise and Experience of Partners.	Frances Ferreira		Commonwealth of Learning	Canada
75	Technology-Enhanced Learning in Vocational Education (Reflective Practices And Collaborative Learning For A Better Employability)	Hanadi Alsuwaidi		Adveti-Sharjah Institute	United Arab Emirates
165	Reach, Effectiveness and Listenership of Community Radio - A Study by National Institute Of Open Schooling	Manoj Thakur		NIOS	India

Tuesday November 29 | PARALLEL SESSION 4

ACCESS & INCLUSION				
Room 302-305		Tuesday 11.00 - 13.00		Parallel Session 4/5
Open, Distance & Flexible Learning for Improving Access in Higher Education Whilst there has been some progress made many organisations and institutions in the Commonwealth are still grappling with issues of how to improve access and to include those who are disadvantaged and marginalised. Open, flexible and online learning approaches have been used to alleviate these challenges in Higher Education institutions.				
Facilitator	Prof Widad Othman	Rapporteur	Nokuthula Vilakati	
Paper ID	Title	Presenters	Institution	Country
217	ODL: Pathway to Sustainable Development of Higher Education in Nigeria	Dr Adenike Oladipo	University of Lagos	Nigeria
389	Impact of Learners' Access to Technologies at Bangladesh Open University	Prof Dr Mohammad A Mannan	BOU	Bangladesh
89	Inaugurating the Use of Open Educational Resources at The University of Swaziland	Dr Shokahle R Dlamini	UNISWA	Swaziland
34	Taking the Virtual University for Small States Initiatives into Action	Dr Stanslaus Modesto	BOCODOL	Botswana
247	A New Wave of Pacific Learning and Teaching: The University Of The South Pacific's First Ever MOOC	Deepak Bhartu, Alison Newell	USP	Fiji
428	Assessment of Higher Education Access Participation and Equity in Taraba State, Nigeria	Dr Elizabeth Sabo		Nigeria
244	Scaling up Access and Inclusion in Cameroon's Higher Education through Open and Distance Learning.	Akame Athanasius Tambu		Cameroon
296	Environmental Education as a Tool to Sustainable Development: Case Study of Lekki-Lagos	Maureen Chukwu Samson Kadafur	NOUN	Nigeria
534	Innovations in ICT Use in Library and Information Science Education Through Distance Mode: An Experience	Prof Dr Dinesh Gupta		
316	The Experience of Adult Learners on the use of Moodle as a Learning Platform	Dr Regina Shikongo Agathe Lewin	UNAM	Namibia
145	E-Learning: Panacea to Excess Demand for Tertiary Education in Nigeria: Case Study of National Open University of Nigeria	Dr Nwamaka Patricia Ibeme	NOUN	Nigeria

413	Making Entrepreneurial Training an Effective Component of Open and Distance Learning: The Case of National Open University of Nigeria	Prof Grace E Jokthan	NOUN	Nigeria
318	Entrepreneurship Training of Micro-Entrepreneurs through ICTs in Open Distance Learning-A Study	Victoria Khumalo, Dr DG Vilakati Prof Chandraiah Esampally	UNISWA	Swaziland

Room 304-305	Tuesday 11.00 - 13.00		Parallel Session 4/5	
PACFOLD				
The Pacific Centre for Open & Flexible Learning for Development - PACFOLD - has been established as a collaboration between COL and the University of the South Pacific. We will hear from the Director of the Centre, the Vice Chancellor of USP and the COL Vice President and discuss the strategy for supporting ODL for increasing access and improving quality and efficiency in education in the Pacific. This session is by invitation.				
Facilitator	Dr Alison Mead Richardson	Rapporteur	Ian Thomson	
Title		Presenters		Institution
Review of PACFOLD		Hasmukh Lal		University of the South Pacific
PACFOLD learn - online community		Dr Alison Mead Richardson		COL
				Country
				Fiji
				Canada

EFFICIENCY & EFFECTIVENESS				
Room 406-407		Tuesday 11.00 - 12.00		Parallel Session 4
Viable Delivery Models in Open & Distance Learning 2				
ODL has been employed in a various institutions using different models but a lot of questions still remain on which models work best and the conditions in which they do so. In this session, presenters will be sharing strategies that were used to integrate technology and OER to ensure better learning outcomes. The session will also cover MOOCs, blended and flexible learning and the balance needed to provide convenient study options, ensure credible outcomes, and maintain competent organizations.				
Facilitator	Dr Abdul Wahab Abdul Ghani		Rapporteur	Assoc Prof Hazidi Bin Abdul Hamid
Paper ID	Title	Presenters	Institution	Country
410	Blended Learning - What Mix/ Flexible Learning - How Supply?	Sir John Daniel Stamenka Uvalic-Trumbic		Canada France
558	Trends in Governance of Asian Open Universities - An Exploratory Study	Madhulika Kaushik, Gajjaraj Dhanarajan	Wawasan Open University	Malaysia
423	Incorporating A Game Based Approach In The Orientation Package Of An Online Course: A Case Study Of Uu204.	Eroni Racule	University Of The South	Fiji
292	Development Of OER Through International Collaboration: E-Qual Case Study	Parul Gupta	British Council	India

424	First Year Learning Experiences On The Use Of Open Educational Resources In Online Learning	Dr Folashade Afolabi, Olajuyigbe, O	University Of Lagos, Akoka-Yaba	Nigeria
229	Exploring The Potential Of OER In The Teaching Of English As A Second Language To Secondary School Students	Ndahi Rebecca Tchameni, Dr Michael Nkwenti Ndongfack	Government High School Zamengoe	Cameroon
132	MOOCs In The Digital Age Learning : An Indian Perspective	Assoc Prof. Venkata Subrahmanyam Vampugani & Swathi Kailasam	Indira Gandhi National Open University	India

QUALITY & EQUITY IN LEARNING				
Conference Hall 3		Tuesday 11.00 - 13.00		Parallel Session 4/5
ICTs and eLearning 1 This session focuses on the adoption of technologies in open and distance learning with the goal of increasing access, inclusion and equity. It explores access and inclusion in the integration of ICT in teacher education and technical education. It also examines how MOOCs, the formulation of OER policy and implementation enhance equity and quality.				
Facilitator	Dr Evode Mukama		Rapporteur	Dr Jackline Nyerere
Paper ID	Title	Presenters	Institution	Country
507	Enhancing quality in online Technical Teacher Education in Sri Lanka	Prof Shironica Priyanthi Karunanayaka	Open University of Sri Lanka	Sri Lanka
473	Processes involved in handling an AGMOOC Course on Nutrition : A personal experience	Prof Dr Vipparti Vijaya, Lakshmi Fariya Khaleel, G Niharika Gamedhar	Professor Jayashankar Telangana	India
238	Embracing the styles of e-learning in an organisation	Phoebe Mere Richard Naidoo		South Africa
400	Educating online in South East Asia	Karen Welsh	Department of Foreign Affairs & Trade	Australia
565	Enhancing on-line teaching and learning - learners' feedback for a strategic management module	Wardah Mohamad, Tuan Fatma Tuan Sulaiman, Liana Mohamad, Ratna Khuzaimah Mohamad, Zahir Osman	Open University Malaysia	Malaysia
441	Quality assurance in online distance learning (ODL): Challenges for USP	Sofina Nisha, Assoc Prof Anjeela Jokhan, Sujlesh Sharma, David Rohindra	University of the South Pacific	Fiji
365	The interacting role of optimism on various determinants of instructors' satisfaction: A case study of e-learning environment	Dr Adnan Riaz		Pakistan

Plenary Hall		Tuesday 11.00 - 13.00		Parallel Session 4/5	
ICTs and eLearning 2					
This session focuses on the adoption of technologies in open and distance learning with the goal of increasing access, inclusion and equity. It explores access and inclusion in the integration of ICT in teacher education and technical education. It also examines how MOOCs, the formulation of OER policy and implementation enhance equity and quality.					
Facilitator	Prof Dr Wardah Mohamad		Rapporteur	Dr Soon Seng Thah	
Paper ID	Title		Presenters		Country
508	Exploring pre-service science teacher's ability in integrating ICT during internship in teaching programme		Prof Manasi Goswami, Rojoni Kanto Lima, Subhashree Priyadarshini, S Gayatri Dora		India
368	Instructional technology and the case for enhancing access inclusion and equity		Dr Biswajit Mohapatra		India
484	Strengthening ICT-integrated university- industry collaboration through ODL: Bangladesh as a case		Md. Taher		Bangladesh
463	Multi-dimensional framework needed for MOOC quality assurance		Prof Paul Kawachi		Japan
504	Mediating effect of attitude on perceived ease of use and intention to use online learning platform among ODL students in Malaysia		Dr Zahir Osman, Noral Hidayah Alwi Bibi Binti Nabi Ahmad Khan		Malaysia
194	Inclusion through humane, quality, and mobile technology		Surajit Mahalanobis		India
180	ICT culture in quality education: ODL perspective		Assoc Prof Sabina Yeasmin		Bangladesh
556	Open, online and flexible learning: the key to sustainable development		Prof Dr Abdul Murad Ahmad		Malaysia
519	Use of ICT in ODL - implications for quality assurance		Prof Dr Pushpa Chakrapani Ghanta		India

TECHNOLOGY & INNOVATION				
Conference Hall 1		Tuesday 10.30 - 13.00		Parallel Session 4/5
UNWomen MOU signing (from 10:30) - Girls Inspire: Sustainable development, data on women and girls matters Women have a critical role to play in all of the SDGs, with many targets specifically recognizing women's equality and empowerment as both the objective, and as part of the solution (UN Women). However, due to the huge data gap - where there is a lack of statistics on how many women and girls live in poverty and inaccurate measures of women's engagement in economic activities - it will be very difficult to achieve the SDGs, unless concerted efforts are made by all involved to collect data on women and girls. To know where we need to go, we need to know what we've achieved, where progress is being made and where major challenges remain. (Maura Paulie, 2014) This session will reflect on why data on women and girls matters and how the insights from data collected, provided the evidence organizations needed to facilitate change.				
Facilitator	Frances Ferreira	Rapporteur	Professor Mostafa Azad Kamal	
Title		Presenters	Institution	Country
Making every woman and girl count : A perspective from UN Women		Dr Phumzile Mlambo-Ngcuka	Executive Director UN Women	USA
How data has galvanized change : A perspective from UKOU		Freda Wolfenden	Open University UK	United Kingdom
Making every woman and girl count: A perspective from MDF		Chetna Sinha	Founder and President of Mann Deshi Foundation	India
How insights from data collected informed strategy for change: A perspective from SPARC		Sadia Husain	CEO Society for the Protection of the Rights of the Child (SPARC)	Pakistan

Room 410		Tuesday 11.00 - 12.00		Parallel Session 4
Emerging Technologies and Innovations for Teaching and Learning Papers in this session showcases innovations in the use of emerging technologies and their implications for teaching and learning. Topics covered in this session would cover, Internet of Things (IoT), Virtual Reality, Learning Analytics, etc.				
Facilitator	Mohammed Ghazali Mohayidin	Rapporteur	Santhi A/P Raghavan	
Paper ID	Title	Presenters	Institution	Country
37	Internet of Things: The Inevitable Technology for Provision of Effective Quality Education.	Francis Wambua	Masai Technical Training Institute	Kenya
118	Virtual Reality and 3D Tours as a Pedagogical Support to Improve Students Experiences at the University	Yousra Banoor Rajabalee, Ravi Rajputh	University of Mauritius	Mauritius

543	Monitoring a MOOC: The Analytics Module of a MOOC Management System	Rajat Jain, Naga Sai Ravi Shankar Mula, Prof TV Prabhakar	Indian Institute of Technology Kanpur	India
96	Technology-Enabled Environments for Flexible Learning: A Case Study at the University of the South Pacific	Dhiraj Bhartu, Deepak Prasad, Aved Yusuf	University of the South Pacific	Fiji
462	Gamification-Embedded eLearning Courses for the Learner Success of Competency Based Education: Case of Technical and Vocational Education and Training	Janaka Jayalath	Tertiary & Vocational Education Commission	Sri Lanka

Tuesday November 29 | PARALLEL SESSION 5

EFFICIENCY & EFFECTIVENESS				
Room 406-407		Tuesday 12.00 - 13.00		Parallel Session 5
Effective Learning Outcomes 2				
One of the global concerns which is reflected in SDG 4 is achieving quality learning outcomes and different institutions are employing different strategies to do so. This session will explore issues surrounding learner satisfaction in ODL, integrating ICTs in teaching History and the impact of this on learning outcomes. It will also address Samoan teachers' perceptions of ODL and how this informs ODL policies, programme design and management.				
Facilitator	Prof Dr Lim Tick Meng	Rapporteur	Dr Fridah Erastus Kanana	
Paper ID	Title	Presenters	Institution	Country
378	A Study Of Pronunciation Problems Of ODL Students In The ESL Programme At The National Open University Of Nigeria.	Theodore Iyere	National Open University of Nigeria	Nigeria
398	Producing Effective Teachers Using Open And Distance Education: A Study Of NTI Graduates	Dr Hafsat Lawal Kontagora Prof Garba Dahuwa Azare	National Teachers Institute, Kaduna	Nigeria
253	Teachers' Perceptions Of Open Distance Learning In Samoa	Dr Rasela Tufue-Dolgoy, Faguele Suaali'i	National University Of Samoa	Samoa
86	The Impact Of Information And Communications Technology On History Learners' Academic Performance In Schools	Prof Olufunmilayo Oloyede, Shabangu Sandile	University of Swaziland	Swaziland

TECHNOLOGY & INNOVATION				
Room 410		Tuesday 12.00 – 13.00		Parallel Session 5
Adoption of Open Educational Resources for Teaching and Learning This session focuses on three innovative examples of OER adoption and integration in developing learning materials for teaching and learning in online learning environment. The OER integration process in these cases led to capacity building of teachers in these institutions.				
Facilitator	Catherine Ngugi	Rapporteur	Mustafa Bin Dakian	
Paper ID	Title	Presenters	Institution	Country
353	A Study on the Adoption and Integration of OER Materials in Self-Instructional Course Development	Mohan Menon, Vasant Bhat, Rama Mathew, Phalachanadra Bhandigadi	Disha Global Trust	India
257	Effectiveness of A Capacity Building Intervention for OER Search and Integration for Course Materials Development	Phalachanadra Bhandigadi, Mohan Menon, Jasmine Selvarani Emmanuel, Chng Lay Kee	Wawasan Open University	Malaysia
117	Designing Reflective Practice in the Context of OER-Based E-Learning	Shironica Priyanthi Karunanayaka, Som Naidu, JCN Rajendra, HUW Ratnayake	Open University of Sri Lanka	Sri Lanka

Tuesday November 29 | PARALLEL SESSION 6

ACCESS & INCLUSION

Room 302-303		Tuesday 14.00 – 16.00		Parallel Session 6/7	
ODFL for Increasing Access in Continuing Professional Development (CPD)					
Lifelong learning is a reality for many people in the Commonwealth as people seek programmes for skilling and upskilling in new job markets. But it is usually necessary to 'learn while you earn' so open, distance and flexible learning options are increasingly important. In this session, we will explore how citizens in different occupations are continuing to study and learn and the challenges and achievements of the institutions which provide for them.					
Facilitator	Assoc Prof Dr Zorah Abu Kassim		Rapporteur	Dr Aini Blnti Ahmad	
Paper ID	Title	Presenters	Institution	Country	
535	Bringing Learning Closer to The Workplace: An Online Course for Librarians in Developing Countries	Joanna Wild, Ravi Murugesan, Dr Veronika Schaeffler, Anne Margaret Powell	INASP	Pan Commonwealth	
405	Improving Access to Postgraduate Training in Crop Protection for Agricultural Practitioners Through Distance Learning at the University of Nairobi, Kenya	Assoc Prof James W. Muthomi, Prof Agnes Mwang'ombe, Prof Florence Olubayo	The University of Nairobi	Kenya	
476	Implementation of E-Learning in Nursing Education in Malawi: The Case of Kamuzu College of Nursing - University of Malawi	Gibson Masache	Kamuzu College of Nursing	Malawi	

454	Usages of Technology to Deliver Health Education Programs to Enhance the Health Status of Bangladesh	Assoc Prof Dr Sharkar Md. Numan	BOU	Bangladesh
270	Teacher Education Programme as a Good Practices of Krishna Kanta Handiqui State Open University	Dr Kanta Chakravarty	KKHSOU	India
311	Distance Education Opens Access to Educational and Career Advancement: The Case of Community Based Workers' Certificate Programme at BOCODOL	Boingotlo Moses Dr Bantu Lulu K Morolong	BOCODOL	Botswana
440	Improving HIV Service Effectiveness and Efficiency Through the Use of Open Learning in Ghana.	Jedidiah Koomson		Ghana
307	Technology for Enhancement of Interactivity in Teachers' Education Through ODL In Conflict Challenged Areas	Sai Iorvaa Peverga	NOUN	Nigeria
330	Prospects of Strengthening Urban Disaster Management Capacity Through ODL System: Role of BoU	Saima Ahmad	BoU	Bangladesh

EFFICIENCY & EFFECTIVENESS				
Room 406-407		Tuesday 14.00 - 15.00		Parallel Session 6
Effective Support Systems for ODL 1 Effective support systems are vital for the quality learning, enhancing completion rates and ensuring better learning outcomes. In this session presenters from India, Namibia and Pakistan will be discussing strategies used learner satisfaction, and the success factors of online support and psychosocial support.				
Facilitator	AP Dr Nantha Kumar Subramaniam		Rapporteur	Dr Harvinder Kaur Dharam Singh
Paper ID	Title	Presenters	Institution	Country
559	The Potential Of Open And Distance Learning In Enhancing The Provision Of Psychosocial Support: A Case Study At NAMCOL	Ndeshimona Laina Afunde	Namibian College of Open Learning	Namibia
131	Examining The Success Factors Of Online Student Support System At AIOU	Kamran Mir & Amjad Mahmood	Allama Iqbal Open University	Pakistan
90	Learner Satisfaction In A Professional Counselor Preparation Program Through Distance-Cum Face-To-Face Mode.	Dr Anil Kumar Kollolath	National Council Of Educational Research And Training (NCERT)	India

QUALITY & EQUITY IN LEARNING				
Conference Hall 3		Tuesday 14:00 – 16:00		Parallel Session 6/7
Open & Flexible Learning in Developing Contexts 1 Insights into why ODL is a first choice for some learners and the impact it creates is interrogated in terms of its contribution to employment and sustainable development. Socio-economic backgrounds, flexibility and use of technology are some of the key factors explored in facilitating decisions on engaging in ODL. Further there is a debate on employability and access to further education as a criteria for quality learning.				
Facilitator	Dr Jackline Nyerere		Rapporteur	Dr Nurul Aliah Binti Mustafa
Paper ID	Title	Presenters	Institution	Country
133	Developing an OER Policy for Provincial Education Ministries in Sri Lanka	Prof Shironica Priyanthi Karunanayaka	Open University of Sri Lanka	Sri Lanka
213	Activating and nurturing the investment of Heutagogical Resources in Open Learning and Open Scholarship	Bernard Nkuyubwatsi	Centre for Learning Technologies	Rwanda
66	Factors influencing the adoption of Flexible Teaching Approaches in Technical Training Institutions in Kenya	Abdi Tiony, Ahmed Ferej, Kisulu Kitainge	Rift Valley Technical Training Institute	Kenya
539	Tracer Study for the Namibian College of Open Learning's secondary education learners	Heroldt Vekaama Murangi	NAMCOL	Namibia
209	Flexible learning materials in a Fixed learning system	Prof Mercy Ogunsola-Bandele	NOUN	Nigeria
98	Curating to creating: An open pedagogy for quality learning	John Okewole	Yaba College of Technology	Nigeria
Plenary Hall		Tuesday 14.00 – 16.00		Parallel session 6/7
Open & Flexible Learning in Developing Contexts 2 Insights into why ODL is a first choice for some learners and the impact it creates is interrogated in terms of its contribution to employment and sustainable development. Socio-economic backgrounds, flexibility and use of technology are some of the key factors explored in facilitating decisions on engaging in ODL. Further there is a debate on employability and access to further education as a criteria for quality learning.				
Facilitator	Assoc Prof Dr Norlia T Goolamally		Rapporteur	Dr Gurcharan Singh A/L Bishen Sing
Paper ID	Title	Presenters	Institution	Country
327	Quality and effectiveness of distance education in secondary and higher secondary programmes of Bangladesh Open University: A learner-based evaluation	Prof Dr Sadia Sultana Prof Mostafa Azad Kamal Ananya Laboni	Bangladesh Open University	Bangladesh

275	OERs: Issues and challenges of copyrights, licensing and access	Prof Dr Siva Prasad Rambhatla, Prof Dr Prabhakar Rao Jandhyala		India
202	Tracing the education and employment status of open school graduates in India	Dr Jyotsna Jha, Neha Ghatak, Shreekanth Mahendiran	Centre for Budget and Policy Studies	India
248	Human capacity building in the Pacific island countries through quality- and access-focused ICT programmes	Sujlesh Sharma, Anjeela Jokhan, Sofina Nisha, David Rohindra	USP	Fiji
157	The effect of collaborative learning on learning styles of allied health students	Dr Kithsiri Edirisinghe		Sri Lanka
159	Factors influencing nursing learners in selecting and engaging open and distance learning as a mode of study for tertiary nursing education	Bitlian Yee, Aishah Ali, Rajiah A Rahim, Aini Ahmad, Dr Mohamad Afzan Khan	OUM	Malaysia

TECHNOLOGY & INNOVATION				
Conference Hall 1		Tuesday 14:00 – 15:00		Parallel Session 6
Social Media in Education Increasing use of mobile and social media has led to innovations in leveraging the affordances of social technologies in creating communities and learning groups. Presenters in this session will share their research and experiences of designing learning environments using social media tools and critically analyse student reactions to such innovations.				
Facilitator	Janet Woo			
	Rapporteur	Dr Raemah Abdullah Hashim		
Paper ID	Title	Presenters	Institution	Country
56	Articulation of Group Dynamics of Undergraduate Students In Social Media	Mohammed Shamsul Haque, Mohamed Emran Hossain, Md Kabirul Islam, Yousuf Mahbubul Islam	Daffodil International University	Bangladesh
148	Social Media as Massive Open Online Resource (MOOR) and the Performance of Francophones Learning Spoken English in Cameroon: A Case Study of the Trilingual Students in the Department of Applied Foreign Languages, University Of Dschang.	Afutendem Lucas Nkwetta	University of Dschang	Cameroon
16	Social Interaction Using Social Media in Open and Flexible Distance Learning System	Sushmita Mitra	Independent Researcher	United Kingdom

16	Social Interaction Using Social Media in Open and Flexible Distance Learning System	Sushmita Mitra	Independent Researcher	United Kingdom
552	Impact Analysis of Teaching Learning Using Whatsapp	Venkata Suresh Pachigolla, Madan Mohan Pant	Indira Gandhi National Open University	India
456	Role of Social Media As Learning Platform for University Students	Irshad Hussain	Islamia University of Bahawalpur	Pakistan

Room 410		Tuesday 14.00 - 15.00		Parallel Session 6	
COL Technology-Enabled Learning Panel					
This session will showcase some of the activities of COL's Technology-Enabled Learning initiative, and share the experiences of developing and implementing new approaches to improve access to quality learning through use of appropriate technologies. Partners will share their experiences that would help others to adopt the innovations and systematic approaches in collaboration with COL. Those who intend to work with COL's TEL initiative should attend this session to get an overview of the range of activities that are currently supported within the current six year plan (2015-2021).					
Facilitator		Sanjaya Mishra		Rapporteur Ashok Gaba	
Paper ID	Title	Presenters	Institution	Country	
74	ICTs and OER Antigua and Barbuda's Journey - An Analysis of ICT Integration and OER Content Development in Antigua and Barbuda	Jacqueline Peters-Richardson	Ministry of Education, Science and Technology	Antigua And Barbuda	
517	A Practice Based Approach Theorizing Digital Education Leadership	Cheryl Brown, Laura Czerniewicz, Tabisa Mayisela, Cheng-Wen Huang	University of Cape Town	South Africa	
335	Technology Enabled Learning: Perspective of University Students	Jayashree Shinde	SNDT Women's University	India	
	Design and Development of Massive Open and Online Course on Technology-Enabled Learning	Prof Dr Martha Cleveland-Innes	Athabasca University	Canada	
	Guidelines for QAA of MOOCs	Sanjaya Mishra	Commonwealth of Learning	Canada	

Room 410		Tuesday 14.00 - 15.00		Parallel Session 6	
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Facilitator		Sanjaya Mishra		Rapporteur	Ashok Gaba
Paper ID	Title	Presenters	Institution	Country	
74	ICTs and OER Antigua and Barbuda's Journey - An Analysis of ICT Integration and OER Content Development in Antigua and Barbuda	Jacqueline Peters-Richardson	Ministry of Education, Science and Technology	Antigua And Barbuda	
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335	Technology Enabled Learning: Perspective of University Students	Jayashree Shinde	SNDT Women's University	India	
	Design and Development of Massive Open and Online Course on Technology-Enabled Learning	Prof Dr Martha Cleveland-Innes	Athabasca University	Canada	
	Guidelines for QAA of MOOCs	Sanjaya Mishra	Commonwealth of Learning	Canada	

Tuesday November 29 | PARALLEL SESSION 7

ACCESS & INCLUSION				
Room 304-305		Tuesday 15.00 - 16.00		Parallel Session 7
MOOCs for Increasing Access to Learning MOOCs are being hailed as the great panacea for all that ails education. But what can they contribute to increasing access and making learning more inclusive? We look at success factors for effective MOOCs.				
Facilitator	Prof Loo Sin Chun		Rapporteur	Youshra Rajabalee
Paper ID	Title	Presenters	Institution	Country
470	MOOC on Integrated Pest Management (IPM): A New Online Venture in Agricultural Education System	Prof Dr Prabhuraj Aralimarad, BV Patil Bheemanna, Prof TV Prabhakar, Dr Neeta Singh	IIT-Kanpur	India

234	The Learn to Learn Online MOOC: Supporting Novice Online Learner Development	Dr Nathaniel Ostashevski Prof Dr Martha Cleveland-Innes	Athabasca	Canada
308	MOOCs As Provisions in Graduate Education for Future Professional Development	Assoc Prof Dr Solveig Jakobsdottir Grimur Bjarnason, Kristinn H Gunnarsson Dora Dogg Kristofersdottir	University of Iceland	Iceland
561	A Study on Competency of Academicians in Developing MOOCs	Assoc Prof Dr Alyani Ismail, Dr Nurul Adilah Abdul Latiff, Assoc Prof Dr Habibah Ab Jalil, Kasma Azizan Kamal, Dr Mohd Hafiz Yusoff	Universiti Putra Malaysia	Malaysia
547	The Journey of Swayam: India MOOCs Initiative	Prof Uma Kanjilal		India

EFFICIENCY & EFFECTIVENESS				
Room 406-407		Tuesday 15.00 – 16.00		Parallel Session 7
Viable Delivery Models in ODL 3				
MOOCs, mobile learning and use of social media are increasingly being used to increase access and promote more effective delivery of ODL programmes. This session will focus on the use of MOOCs in Nigeria and India; use of blended learning for CPD for health workers in Uganda; evaluation of mobile educational applications in south Africa; and the use of social media for to facilitate health care research in Sri Lanka. , while other presenters will share experiences on using mobile.				
Facilitator	Dr Zakaria Bin Ismail		Rapporteur	Samuel Siminyu
Paper ID	Title	Presenters	Institution	Country
518	Running NOUN-MOOC On MOOkit Platform: Insight From Collaboration Between Institute Of Technology Kanpur And National Open University Of Nigeria	Dr Jane-Frances Agbu Okechukwu Okafor	National Open University Of Nigeria	Nigeria
383	Effectiveness Of Agile Design In Wrap-Around Content Development	Denise Gaspard-Richards	The University Of The West Indies Open Campus	Trinidad and Tobago
291	Is Blended Learning Suitable For Continuous Professional Development (CPD)? A Case Of Health Manpower Development Center (HMDC), Ministry Of Health, Uganda.	Resty Mwogeza		Uganda

146	Use of Social Media In Facilitating Health Care Research Among Nursing and Allied Health Undergraduates in Sri Lanka	Nishan Silva	International Institute Of Health Sciences Sri Lanka	Sri Lanka
272	MOOCs: Pedagogies That Travel	Dr Salima Jan	Educational Multimedia Research Centre, University Of Kashmir	India

TECHNOLOGY & INNOVATION				
Conference Hall 1		Tuesday 15:00 – 16:00		Parallel Session 7
Technology and Engagement in Massive Open Online Courses (MOOCs) The emergence of Massive Open Online Courses as an innovation to reached large number of learners across the continents brings in several new challenges and innovations. The range of papers in this session addresses some excellent innovations such as capacity building using a blended MOOC, mobile adaptable MOOC, and student engagement in the crowd.				
Facilitator	Prof Dr Lim Tick Meng		Rapporteur	Dr Chiam Chooi Chea
Paper ID	Title	Presenters	Institution	Country
245	Extending the MOOC Footprint: Supporting Capacity Building in India	Freda Wolfenden, Simon Cross, Fiona Henry	The Open University	United Kingdom
510	Mobi-MOOCs: A Simple and Effective Way to Deliver Educational Content	Gaurav Shukla, Sharwan Shukla, Prof TV Prabhakar	Indian Institute of Technology Kanpur	India
258	Crowdsourcing MOOC Interactions: Using a Social Media Site C-MOOC to Engage Students in University Course Activities	Jon Dron, Jennifer Howell, Nathaniel Ostashevski	Athabasca University Curtin University	Canada

Room 410		Tuesday 15:00 – 16:00		Parallel Session 7	
Perspectives in Online Learning: From Design to Quality Assurance					
While online learning is becoming pervasive, and more and more face-to-face teaching institutions are adopting online learning to increase access and improve quality, the trend has been towards blending of ICT applications and learning designs. Presenters in this session will share their research in to the use of online learning tools and technologies from across the Commonwealth and discuss a range of issues from challenges to quality assurance.					
Facilitator		Dr Nantha Kumar Subramaniam	Rapporteur	Jacqueline Peters-Richardson	
Paper ID	Title	Presenters	Institution	Country	
530	Open and Distance Learning: Benefits and Challenges of Technology Usage for Online Teaching and Learning in Africa	Ivy Rose Mathew, Jane Ebele Iloanya	Botho University	Botswana	
6	The Integration of Multimedia for Online and Blended Learning at the University of The South Pacific	Javed Yusuf, Deepak Prasad, Dhiraj Bhartu	University of the South Pacific	Fiji	
434	Assessing E-Learning Maturity @ University of Mauritius Using EMM V2.3 as a Benchmark	Assoc Prof Mohammad Santally, Anna Crystel Chu Sun Wah, Goonesh Kumar Bahadur	University of Mauritius	Mauritius	
127	Elearning Tools at the University of the South Pacific	Assoc Prof Anjeela Jokhan	USP	Fiji	
142	Learners’ Perceptions on Curriculum-Linked Videos on English for Creating Constructivist and Blended Learning Environment	Md Mizanoor Rahman	Bangladesh Open University	Bangladesh	
91	Using Technologies and OER to Enhance the Efficiency and Quality of Higher Education in Bangladesh: Opportunities and Challenges	Mostafa Azad Kamal, Philip Uys	Bangladesh Open University	Bangladesh	

Wednesday November 30 PARALLEL SESSION 8				
ACCESS & INCLUSION				
Room 302-303		Wednesday 11.00 – 12.00		Parallel Session 8
Policy to Support Increasing Access Developing enabling policy for ODFL is in itself a challenge – but the real test comes in the implementation. This session investigates the impact of policy on increasing access and making learning more inclusive with a focus on the African and Asian regions.				
Facilitator	Assoc Prof Mohammad Santally	Rapporteur	Dr Hazalinia Binti Hashim	
Paper ID	Title	Presenters	Institution	Country
493	Gender Policy for Open Schooling in India	Anita Devraj	NIOS	India
162	Skill Development Through MOOC for Inclusive and Sustainable Development: A Review of Policies in the Asian Commonwealth Countries	Prof Dr Ashok Gaba, Dr Sanjaya Mishra		
94	From Policies to Implementation of Open Distance Learning in Rwanda: A Genealogical Analysis of What and How	Dr Evode Mukama	University of Rwanda	Rwanda
276	Educational Technology Policies in India And Access	Prof Dr Prabhakar Rao, Jandhyala Prof Dr Siva Prasad Rambhatla		India
3	ODL, ICTS And Knowledge Society New Roles with Knowledge Gaps and Policy Apathy in India	Debal Singharoy	Indira Gandhi National Open University	India
172	Analysis of E-Learning in Kenya: Its Effects, Public-Private Partnership, Policies and Framework	Grace Gakinya, Jefferson Kariuki	Thika Technical Training Institute	Kenya
Room 304-305		Wednesday 11.00 – 13.00		Parallel Session 8/9
Strategies for Increasing Access Identifying challenges is one issue – but it is more important to find solutions. In this session, COL partners share their strategies for facing the challenges of meeting the ever-increasing demand for learning opportunities.				
Facilitator	Dr Donald Peters	Rapporteur	Pauleen Finlay	
Paper ID	Title	Presenters	Institution	Country
160	Creating Engaging Self-Learning Opportunities for Out-Of-School Children	Dr Nanda Wanniarachchi		

252	Preventing Child, Early and Forced Marriage Through Open, Distance and Technology-Based Education and Training: Visualizing Process and Impact to Develop an Institutional Framework for Mann Deshi Foundation	Kuntal De	Mann Deshi Foundation	India
487	Developing A Commonwealth Centre for Connected Learning: A Case Study in the Wealth of Networks	Dr Alexander Grech		Malta
536	Development of Learning Buffet Model for Open and Flexible Learning	Dr Nurkhamimi Zainuddin Musa Bin Ahmad Prof Dr Rozhan Idrus	Universiti Sains Islam	Malaysia
166	Learning Hubs Help-Access Secondary Education with Innovation	Dr Bijay Nanda Department of Scheduled Caste & Scheduled Tribe	Government of Odisha/DFID	India

EFFICIENCY & EFFECTIVENESS				
Room 406-407		Wednesday 11.00 - 12.00		
ODL for Effective Skills Development				
More and more institutions are employing ODL methodologies for skills development with varying levels of success. This session will focus on examining the use of ODL for vocational training in Namibia, software engineering in Sri Lanka, non-formal radio programmes for behavioral changes in Nigeria and use of Open Schooling for skills development in India.				
Facilitator	Dr P Thamizoli	Rapporteur	Assoc Prof Saedah Binti Muda	
Paper ID	Title	Presenters	Institution	Country
218	When The Drum Beats: Radio Drama As A Vehicle For Behaviour Change In Climate Change Adaptation Amongst Rural Small Holder Farmers	Rebecca Ojedele	African Radio Drama Association (ARDA)	Nigeria
384	Bachelor Of Software Engineering: A Case Study For An Effective Degree Programme	Dr Hemali Ratnayake, Dr LSK Udugama		Sri Lanka
175	Efficient & Effective Inclusive Open Schooling And Skills Development For Sustainable Development Through Innovative Public Private Partnerships	Guilherme Vaz		India

Room 408-409		Wednesday 11.00 - 13.00	Parallel Session 8/9
Virtual University for Small States of the Commonwealth (VUSSC): A Model for Collaboration This session will explore how the Virtual University for Small States of the Commonwealth (VUSSC) has used collaboration as a tool to engage with institutions in the Commonwealth to build capacity and share open educational resources in order to improve access to quality learning opportunities.			
Facilitator	John Lesperance	Rapporteur	Prof Manthoto Lepphoto
Title		Presenters	
The University of Swaziland Case Study		Dr Shokahle Dlamini, Nokuthula Vilakati	UNISWA
The BOCODOL Model: Embracing VUSSC		Dr Daniel Tau	BOCODOL
Reaching the unreached: Training of in-service teachers using technology		Dr Mohammad Santally	UoM
VUSSC Transnational Qualifications Framework		Franz Gertz	NQA
			Swaziland
			Botswana
			Mauritius
			Namibia

QUALITY & EQUITY IN LEARNING			
Plenary Hall		Wednesday 11.00 - 13.00	Parallel Session 8/9
Open Education Licensing Policies for Government and Institutions Education leaders from universities and governments will learn how open education licensing policies can expand access to affordable, high quality OER. The workshop will explore how to create, adopt and implement open policies, and will discuss open policy barriers and solutions.			
Facilitator	Cable Green : Creative Commons	Rapporteur	Teenah Jutton

TECHNOLOGY & INNOVATION				
Conference Hall 1		Wednesday 11:00 - 12:00		
Transformation of Institutional Practices Using Open Educational Resources				
Papers in this session focus on institutional experiences of implementing open educational practices, OER policy and open publishing to improve quality of learning opportunities.				
Facilitator	Prof Dr Wardah Mohamad		Rapporteur	Greg Onwodi
Paper ID	Title	Presenters	Institution	Country
116	Transformational Change at The Intersections of Technology, Education and Design	Shironica Priyanthi Karunanayaka, Mohan Menon, Som Naidu	Open University of Sri Lanka	Sri Lanka
346	The Contribution of an Open Publishing Model to Solving a Fundamental Educational Need	Tessa Welch, Jennifer Glennie	SAIDE	South Africa
306	Separating the Rhetoric from the Reality: The Process of Institutionalizing OER Practices at African Universities	Catherine Ngugi, Neil Butcher	OER Africa	Kenya
55	Formulating and Implementing an Institutional OER Policy to Improve Practice: A Study of Progress of an OER Based M.Ed Program at IDE, UNISWA	Chandraiah Esampally, Dr Njabuliso Nsibande, Nokuthula Thembi Vilakati	University of Swaziland	Swaziland
Room 410		Wednesday 11.00 - 12.00		
Design and Development of Online Learning Applications				
Designing appropriate online learning solutions have always been a creative and iterative process. Presentations in this session would cover new design solutions for online learning in the Commonwealth.				
Facilitator	Jayashree Shinde		Rapporteur	Manas Ranjan Panigrahi
Paper ID	Title	Presenters	Institution	Country
549	Building an Efficient and Effective Test Management System in an ODL Institution	Safiah Md Yusof , Zainuriyah Abdul Khatab, Lim Tick Meng, Leo Png, Harvinder Kaur Dharan Singh,	Open University Malaysia	Malaysia
418	ESL Students' Perception of Computer and Paper-Based Assessment Mode in Open and Distance Learning in Nigeria	Theodore Iyere		Nigeria
285	Pushing the Boundaries: The Design of a Web-Based Program in a Developing Context	Ruth Aluko, Tony Mays, Hendri Kruger	University of Pretoria	South Africa

231	Development of an E-Learning Architecture Based on Numerical Computing Software for Electrical Engineering Education in Open and Distance Mode	Isuru Asanga Premaratne	The Open University of Sri Lanka	Sri Lanka
554	Resource Architecture in the Virtual Digital Learning Landscape (RAVD)	Prof Dr Rozhan Idrus	University Sains Islam Malaysia	Malaysia

Wednesday November 30 PARALLEL SESSION 9				
ACCESS & INCLUSION				
Room 302-303		Wednesday 12.00 - 13.00		Parallel Session 9
Barriers to Increasing Access Technology and ODL have provided new ways to reach learners but challenges do exist in many developing countries which have prevented learners to harness the potentials of ODL. This session will explore how technology and ODL can help improve access and the challenges being faced by developing countries.				
Facilitator	Dr Chung Han Tek		Rapporteur	Dr Patricia Benn
Paper ID	Title	Presenters	Institution	Country
106	The Perception of Students About the Cost of Studying by Open and Distance Learning: Case of The University of Goroka	Martin Otto	SINU	Solomon Islands
8	Enrolment Motivations and Institutional Attachment of 30+ Age Bangladeshi Women at Distance Learning Programs	Dr Zobaida Akhter	BOU	Bangladesh
421	Cognitive and Affective Engagement in A Comparative Perspective: An Evidence of Formal and Non-Formal Post Graduate Students	Hamid Ali Nadeem, Dr Ehsan Mahmood, Irfan Haider	AAIOU	Pakistan
201	How "Open" is Open School in India?	Dr Padmaja Pancharatnam Puja Minni, Dr Jyotsna Jha	NIOS	India
480	E-Learning for the Developing World Reaching the Unreachable	Suresh Munbodh		Mauritius

EFFICIENCY & EFFECTIVENESS				
Room 406-407		Wednesday 12.00 - 13.00		Parallel Session 9
Effective Support Systems for ODL 2 Effective support systems are vital for the quality learning, enhancing completion rates and ensuring better learning outcomes, and more and more institutions are using ICTs and social media for learner support. In this session, experiences from Trinidad & Tobago, India and Mauritius will be shared.				
Facilitator	Dr Janet Woo Tai Kwan		Rapporteur	Kristina Stutchbury
Paper ID	Title	Presenters	Institution	Country
10	Facilitating E-Learning Using Collaborative And Social Methods In The 21 st Century	Dr Steve Warner, Prof Nabi Bux Jumani	University of West Indies, ROYTEC	Trinidad And Tobago
302	Professional Development of Teacher Educators on ICT Integration In Education For Establishment of Community of Practice For Sharing Learning Resources and Teaching-Learning Practice: An Evaluation	Dr Manas Ranjan Panigrahi, Prof MU Paily	Commonwealth Educational Media Centre for Asia	India
553	Interactive Materials Development Using The Rapid E-Learning Method : A Case Study	Ravi Rajputh, Soni Jignesh		Mauritius
29	Challenges Of Dual-Mode Universities: A Perspective Of International Islamic University Islamabad Pakistan	Prof Dr Nabi Bux Jumani, Fouzia Ajmal	Directorate of Distance Education, International Islamic University Islamabad	Pakistan

TECHNOLOGY & INNOVATION				
Conference Hall 1		Wednesday 12.00 - 13.00		Parallel Session 9
Case Studies on Open Educational Resources (OER) This session present three case studies on use of OER. Sustainability of OER development is a matter of concern, and the papers in this session highlight the challenges and opportunities of adopting OER in national and institutional contexts.				
Facilitator	Phalachanadra Bhandigadi		Rapporteur	Sukant K Mahapatra
Paper ID	Title	Presenters	Institution	Country
155	OER Taking Schools from Resource Poor to Resource Rich	Ian Thomson	University of the South Pacific	Fiji
122	Open Educational Resources and Practices at the University of the South Pacific: Status Report and Future Directions	Deepak Prasad, Dhiraj Bhartu, Javed Yusuf	University at the South Pacific	Fiji
390	MERLOT: A Case Study of Sustainability in Open Educational Resources (OER)	John Okewole, Irene Knokh	Yaba College of Technology	Nigeria

Room 410		Wednesday 12.00 – 13.00		Parallel Session 9	
Innovative Use of Mobile Devices and Apps					
Mobile devices and mobile apps bring in several new opportunities and innovations to teaching and learning environments. This session presents some innovative examples and use of Mobile Apps and mobile devices for improving teaching and learning. (For more about Print2Screen see Market Exchange.)					
Facilitator		Mangala Sunder Krishnan		Rapporteur Md Kabirul Islam	
Paper ID	Title	Presenters	Institution	Country	
28	Print2Screen Mobile App: Embedding Multimedia in Printed ODL Course Materials using QR Codes	Ishan Sudeera Abeywardena	Commonwealth of Learning	Canada	
154	Use of Tablet Computers to Improve Access to Education	Mohamed Ally, Anwar Abdulbaki, Raffat Khaqan, Ricky Cheng, Zarmina Tariq Nasir	Athabasca University	Canada	
48	What Mobile Devices Mean to the 21St Century Teenagers?	Lay Kee Chng, Jasmine Selvarani Emmanuel	Wawasan Open University	Malaysia	

Exhibition Hall		Wednesday 14.00 - 15.00		Parallel Session 10	
Poster Session During this dedicated session, authors of accepted posters will present and be available to discuss their work and findings. Poster presentations make a crucial contribution to knowledge sharing and discussion of PCF8 themes.					
Facilitator		Anne Gaskell	Rapporteur	Dr Sishi Kumar A/L Piaralal	
ACCESS & INCLUSION					
Paper ID	Title	Presenters		Institution	Country
548	The Commonwealth Scholarship Commission Offering Funded Opportunities Through Distance Learning	Vanessa Worthington		Commonwealth Scholarship Commission	UK
67	Intercultural Competence Development for Open and Distance Learning	Dr Robert Aucoin Ining Chao		Royal Roads University	Canada

EFFICIENCY & EFFECTIVENESS					
Paper ID	Title	Presenters	Institution	Country	
512	Urdu Braille Translator & Braille Proficiency Testing To Increase Braille Literacy For Visually Impaired Students	Muhammad Zahid, Iqbal Mustafa Naseem	Information Technology University, Lahore	Pakistan	
222	Performance Evaluation Of Real Time E-Lecturing System And Face-To-Face Classroom Learning Experience	Dr Nureni Yekini, Adebari Fasasi	Yaba College Of Technology	Nigeria	
36	Nine Events Of Multimedia Learning Objects: A Taxonomy For Quality E-Learning	Candice Sankarsingh	University Of The West Indies Open Campus	Trinidad & Tobago	
486	Reaching The Unreached	Chetna Sinha, Vanita Shinde	Mann Deshi Foundation	India	



ABSTRACTS

Sub-theme:
**ACCESS AND
INCLUSION**

OPEN DISTANCE LEARNING: PATHWAY TO SUSTAINBLE DEVELOPMENT OF HIGHER EDUCATION IN NIGERIA

Adenike Julianah Oladipo

This paper examines the level of commitment of Open and Distance Learning Institutions to the global development goals with emphasis on access to education in Nigeria. Documentary evidence pertaining to the demand and supply of university education as well as the level of enrolment and graduate output in the Distance Learning Institute (DLI), University of Lagos is presented. It is observed that the level of unsatisfied demand for university education has continued to rise over the past 15 years, reaching its highest value in 2014. Concomitantly, a steady rise in the level of enrolment in DLI was also found with the highest enrolment recorded in 2012. In effect, a significant relationship between the level of enrolment in DLI and that of unsatisfied demand for education was established. Also graduate output was significantly related to students' enrolment in the DLI, University of Lagos. On the other hand, the long term trend in enrolment was upward in all disciplines with Business Administration and Accounting recording the highest enrolment as opposed to Science Education. The paper thus recognises the fact that Open Distance Learning is a giant step towards providing greater access to university education and recommends that more Open Distance Learning centres should be established in Nigeria in order to further broaden the access to university education for all. Finally, more disciplines should be included in the Distance Learning Institute (DLI) University of Lagos programmes.

ACCELERATING SUSTAINABLE DEVELOPMENT THROUGH FLEXIBLE LEARNING: RE-ORIENTING ENTREPRENEURSHIP EDUCATION

Agnes J. Rono, Edwin Tarno & Abdi Tiony K.

One approach to enhancing entrepreneurial activity and enterprise growth in developing countries is to create an 'enterprise culture'. To achieve a widespread enterprise culture in the long run, education and training programs in Kenya and in other developing countries need to integrate business, technology, self-employment, and entrepreneurship into the curriculum on the youth of the country. Also, given the widely accepted notion that entrepreneurial ventures are the key to innovation, productivity, and effective competition; the question of whether entrepreneurship can be taught is obsolete. The teaming mass of unemployed youths in the country and the global economic crisis has increased the urgency for countries to identify new sources of growth and develop a sustainable path to economic success. This urgent need for re-orientation calls for a revolution in the system of education that we run as a nation. This study used a qualitative approach using secondary data to examine how flexible learning can be applied in entrepreneurship education. This paper argues that flexible and open learning is the perspective the entrepreneurship educators should adopt to not only leverage on constant, flexible and student-fit digital content and learning, but also life-long availability of content for nascent and practicing entrepreneurs to learn and relearn relevant skills for creation, management, growth and innovation of competitive business ventures in a digital economy. Along with this, it recommends strong governmental commitment to information and communication technology (ICT) as one of several critical elements needed to help accelerate entrepreneurship and innovation. We also address both benefits and challenges to anticipate when using flexible learning in entrepreneurship education and training.

SCALING UP ACCESS AND INCLUSION IN CAMEROON'S HIGHER EDUCATION THROUGH OPEN AND DISTANCE LEARNING

Akame Athanasius Tambu

Cameroon like many other African countries is faced with the challenges of Higher education due to its underdevelopment. The ever rising student population from diverse socioeconomic, cultural and ethnic background calls for greater opportunities to education. This means a mode of delivery that will be accessible and inclusive to all irrespective of gender, culture, social status and whether people are physically challenged or not. Therefore this study shows how the government of Cameroon and its partners integrate distance learning in to its educational system in order to scale up access and inclusion in Cameroon's Higher education. (Law n° 005 of 16 April 2001, on the Orientation of Higher Education). This paper thus examines the role of the Cameroon government and the Commonwealth of Learning in the implementation of this policy and the institutional framework of Open and Distance Learning in Cameroon's Higher education. The paper also pries on the contributions and challenges of Distance learning to social inclusion in Cameroon. It equally evaluates the primordial importance of open and Distance Learning and technologies in increasing access to teacher training and other programs in Cameroon. Finally the paper discusses some problems hindering access and inclusion through Open and Distance Learning in Cameroon's Higher education and therefore makes recommendations, which if taken in to consideration would certainly optimize access and inclusion in this domain. The study was carried out in some selected Open and Distance Learning Institutions in Cameroon. The targeted populations were Coordinators and students of various Open and Distant Learning Institutions as well as experts in Distance learning in Cameroon. The data was collected through documentary inquiry and interview and analyzed using the inductive approach. The outcome indicates that many students now have access to higher education and inclusion can be well ensured through open and distance learning.

CONTRIBUTION OF ODL TOWARDS EMPOWERING WOMEN SOCIO-ECONOMICALLY IN BANGLADESH

Akm Iftekhar Khalid

Empowering women is a widely discussed issue in the Commonwealth countries and specially the women, who once dropped from the mainstream education but were potential to involve themselves in the economic and leadership activities and to change their lives as well for the society in general. Since Bangladeshi mainstream education system does not allow drop out women or men to enroll in education institutions, Open and Distance Learning (ODL) is a significant opportunity for those women to be involved again in education to nourish their skills in economic and political spheres. This research aimed to hear from the women who participated in a formal program through ODL and later became successful business entrepreneurs, social and political leaders and created changes in their own economic and social sphere as well as have become employers, leaders and brought opportunities for other women. This study was conducted in Joypurhat, a considerable less developed northern district of Bangladesh. Using in-depth interview method this study collected findings from 11 women about their struggles, impediments, frustrations, rise from the fall and reaching a height of stability. This study also heard women experiences with ODL. The study shows that the contribution of ODL for human resource development is rising up and it is becoming a very eminent option for women who

dropped out in their earlier age. Sharing their achieving stories and their experiences and suggestions for ODL with ODL practitioners, policy makers, world leaders, politicians, and educators is important because it could find out more women friendly education to encourage women to be involved in socio-political and economic spheres.

DEVELOPING A COMMONWEALTH CENTRE FOR CONNECTED LEARNING: A CASE STUDY IN THE WEALTH OF NETWORKS

Alexander Grech

This paper leverages on a live case study to examine frameworks for the development and rapid activation of global, pilot connected learning programmes. It describes the strategies and tactics deployed in the establishment of a Centre for Connected Learning (CCCL) in Malta in 2016, a joint venture between COL and the Ministry for Education and Employment in Malta. The Centre is positioned as a virtual hub in a global network of educators, learners and teaching institutions in 53 Commonwealth countries and 28 countries in the EU. It leverages on social technologies to facilitate projects that embrace the three core connected learning values of equity, full participation and social connection. Within this context, the paper also examines how the island state of Malta is being positioned as a connected, netnographic digital lab that facilitates a complex setting for short-term pilots and research on digital pedagogy, 21st century skills and new education accreditation models. The paper examines proposals driven by the CCCL to address inequalities and social integration through co-learning and better access to lower cost education and open education resources. It concludes with suggestions for policies that may align the interests of co-learners, peers, academics, training institutions and more ethical forms of interactive and networked media.

UNLOCKING THE POTENTIALS OF COMMONWEALTH OF LEARNING (COL) FLEXIBLE SKILLS DEVELOPMENT (FSD)/FLEXIBLE AND BLENDED (FAB) MODEL IN THE TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET) SECTOR IN NIGERIA: TOWARDS IMPROVED ACCESS AND QUALITY SKILLS DEVELOPMENT THROUGH THE NATIONAL VOCATIONAL QUALIFICATIONS FRAMEWORK

Amina Idris

Nowadays, there are new landscapes in increasing access and improving the quality of skills development, where physical and virtual environments are blended to support learning in TVET educational institutions. Harnessing this new strategy in Nigeria can unlock the potentials to improve skills development thus suppressing the constraints and challenges inherent in our learning environment. Resolving these issues is a central philosophy of the Flexible and Blended Skills Development programme of the Commonwealth of Learning (CoL) owing to the newness of flexible blended learning and technology experience in TVET sector in Nigeria, this paper examines the potentials in harnessing this viable CoL approach that can catalyze effective quality skill development. The effort of the National Board for Technical Education (NBTE), in promoting Flexible and Blended TVET learning in Nigeria, and embedding it as a legitimate learning environment that can enhance effective skills development, the challenges especially, in responding to the complexity of the environment.

This paper further reports the activities of Commonwealth of Learning (COL) in this new wave and offers the way forward in embracing this new wave of change in the drive to enhance skills by developing appropriate quality delivery platforms, making use of available infrastructure that is accessible, inexpensive and pedagogically effective to enhance skills development in the country.

LABOUR MARKET PROSPECTS OF THE GRADUATES OF AUCHI POLYTECHNIC FLEXIBLE SKILLS DEVELOPMENT PROGRAMMES

Angela Egele & Che Ann Abdul Ghani

In Nigeria, many institutions would like to employ graduates who are ICT literate. This trend of employment has prompted many parents to enrol their children for computer courses as a step to help their children acquire computer skills and subsequently, have better job opportunities. In retrospect, many of these parents have chosen Auchi Polytechnic as their first choice since this institute offers Flexible Skills Development (FSD), an initiative of the Commonwealth of Learning (COL). This programme encompasses short courses on computer literacy and other vocational skills. This study investigated whether graduates of the first batch of FSD programmes had improved their livelihood. This study used both quantitative and qualitative methods of data collection to elicit responses from the graduates and their instructors. The findings from this study revealed that the skills that the FSD graduates acquired had reasonably improved their livelihoods. This study recommends that Tracer Study be carried out frequently in order to monitor the progress of ex-students of FSD courses. In conclusion, this study is timely because it will enable the curriculum developers of the FSD courses to adopt best practices.

GENDER POLICY FOR OPEN SCHOOLING IN INDIA

Anita Devraj

Gender cuts across class, caste, colour, religion, race, ethnicity and other variables. Even though the Constitution of India has granted equality to its citizens before the law, social reality is very different from the legal rights and responsibilities of equality granted to all its citizens, irrespective of gender. India's National Policy on Education (NPE) 1986 and its revised Programme of Action (POA) 1992 has ensured that the policy be geared towards bringing gender equality and women's empowerment. Other policy documents, like The National Policy on Women's Empowerment 2001, Sarva Shiksha Abhiyan (SSA) 2001, National Curriculum Framework 2005, Position Paper Focus Group on Gender Issues in Education 2006, Rashtriya Madhyamik Shiksha Abhiyan (RMSA) 2009, Right to Education (RTE) 2009 etc. continue to lay emphasis on promoting and integrating gender equity, equality, justice and empowerment through various national and regional programmes. However the ultimate goal of gender equality remains elusive and still much remains to be done. Gender continues to be one of the most important issues in the context of access and inclusion. Globally, Sustainable Development Goal 5 that talks about Gender Equality, is a crucial one. In this backdrop, National Institute of Open Schooling of India (the largest open schooling system in the world), has developed a Gender Policy for open schooling, in collaboration with COL. With this, NIOS has become one of the pioneering institutions in the country to take a big leap in rewriting its history towards its stated vision and mission, to mainstream gender concerns and thus strive to bring gender equity and equality in the institution. In

this paper, the author, who participated in the process of developing this policy as COL Consultant, will discuss the policy - its objectives, scope, strategies for implementation, etc. The process of developing the policy will also be described in detail.

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MAKING LEARNING MORE ACCESSIBLE FOR WOMEN: THE PRACTITIONERS' VIEWPOINT

Anita Priyadarshini

Open and distance learning is recognized as a system that champions the cause of education for girls and women and has the potential to address the challenges of inequity and gender inequality. The flexibility in the ODL system combined with the extensive use of online platforms has made ODL a preferred choice for seekers of lifelong learning. However in India, there continue to be barriers that restrict women from easy access to higher education. While some of these are created by socio-economic deprivations, there are often roadblocks generated by the system itself. The overwhelming numbers tend to make the system impersonal and 'distant', placing women learners at greater disadvantage than their male counterparts. Evaluation studies reveal need for programme accessibility in the preferred technology medium of women learners. There is also need for programmes that empower women even if enrolment is low. In view of this, there is need to introspect and revisit the system to reflect whether ODL has achieved all that it was set up for, in terms of physical accessibility, tutorials, technology

and other provisions that facilitate for women's learning. The present paper is based upon the opinions and views of ODL practitioners related to accessibility and inclusion in the area of higher education. The practitioners included male and female teachers with ODL experience ranging from 5 to 30 years. The views were elicited through mixed mode that included interviews and brainstorming sessions. Existing learner data, documents, programme evaluation studies were analysed. Issues raised pertained to access and equity, programme design, counselling, technology, media, infrastructure, programme delivery, research on women's issues, training programmes to promote gender sensitivity, livelihood and employment. The present paper attempts to contribute to designing future strategies for making learning more accessible for women and thus bringing about greater gender balance in education.

STRATEGIES TO ENHANCEMENT OF FEMALE-LEARNERS' ACCESS INTO SET-COURSES; CASE OF MARINE ENGINEERING LEARNERS IN MTTI, KENYA

Anne Polly Kagwiria Kithinji

Perceptions and realities associated with male or female -dominated subjects, courses and careers are gradually changing due to socio-economic lifestyle shift. This paper aimed at exploring strategies for enhancing female participation in SET courses with close examination of Marine Engineering students in Mombasa Technical Training Institute. Objectives of the study included: to explore various factors influencing female participation in SET courses; to investigate retention and completion rate of female students in marine engineering students; to establish strategies for enhancing female participation in SET courses; to determine relevance in female students enrolling in SET courses with reference to Marine Engineering students. The study used case study research design and document desk review of relevant research literature. Questionnaires and interview guides were used as instruments of data collection. Resultant data was quantitatively and qualitatively analyzed. Descriptive data analysis was done using measures of central tendencies while content analysis was applied for descriptive data analysis. Findings revealed reluctance by female students to enroll in SET courses due to various factors. There was high dropout rate of female students from marine engineering due to different reasons. However majority of female students who pursued marine engineering maintained the course was relevant for sustainable livelihood. The paper reveals that application of strategies such as advocacy, gender mainstreaming approaches, policy and partnerships would improve access of female learners into SET courses. The paper concludes that adoption certain gender mainstreaming approaches; advocacy, partnerships and ODL within educational institutions policies enhance access and equitable opportunities to relevant education for sustainable development.

EMARKETING OR PAPER-BASED MARKETING STRATEGIES AT THE COLL: WHICH IS MORE EFFECTIVE?

Antoinette Mukendwa

The Centre for Open and Lifelong Learning is one of six centres at the Namibia University of Science and Technology with the mandate to design and deliver open and distance learning at the institution. Until 2010, when the COLL added eLearning as a new offering type, distance education was offered predominantly via print-based methods. The upsurge in distance education can be

attributed to continued advancements in technology enhanced learning. Although the numbers of universities are increasing, higher education institutions cannot cope with the sheer volume of students. eLearning has thus become the sought-after alternative to accommodate student numbers. The continued popularity of eLearning all around the world has led to the opening up of eLearning to international markets. Most educational institutions are now cognisant of the need to market them accordingly. Marketing in the higher education environment is as a result evolving. Marketing research in higher education institutions predominantly applies marketing communication strategies from the business world. This enables institutions to determine and develop sources of information which could potentially assist students in deciding which institution to attend, which course to choose or even which mode of learning to embark upon. There exists, however, a gap between choice factors as identified by students and the information that is provided to them by the higher education institutions. There is thus a great need for higher education institutions to appropriately research which message best speaks to the student. In attempting to increase eLearning student numbers at the COLL, this study therefore examined and explored the most effective marketing communications methods and media for advertising eLearning courses using a mixed method approach. Findings from this study demonstrate that students find the combination of eMarketing and print-based strategies equally useful.

SKILL DEVELOPMENT THROUGH MOOC FOR INCLUSIVE AND SUSTAINABLE DEVELOPMENT: A REVIEW OF POLICIES IN THE ASIAN COMMONWEALTH COUNTRIES

Ashok K. Gaba & Sanjaya Mishra

Economic growth of the Commonwealth countries in Asia depends on productivity and the availability of the skilled human resources. About 70 per cent of the Commonwealth's two billion citizens belong to South Asia. Skilled human resources are crucial factor for inclusive growth and achieving sustainable development goals. Hence, Skill development policies and practices of these nations occupy a dominant place in sustainable development discussion. Massive Open Online Courses (MOOC) can play crucial role for enhancing skills of existing workforce and help build the capacity of the young people to be prepared with appropriate skills for the job market. For inclusive growth and sustainable development, Asian Commonwealth countries need to respond to the challenges of knowledge economies. Based on secondary sources of information this paper (a) analyses skills challenge faced by Commonwealth countries in Asia; (b) reviews existing policies for skills development and use of MOOCs for strengthening skills, and (c) discusses strategic approaches to skills development through MOOC for skills development. Analysing the published literature, it presents an overview of public policy on skills development and use of MOOCs for skills development in Asian Commonwealth countries.

TECHNOLOGY MEDIATED TEACHING/LEARNING AS A PATHWAY TO INCLUSIVE HIGHER EDUCATION FOR SUSTAINABLE DEVELOPMENT: WHAT ARE THE PENDING GENDER ISSUES?

Bantu Lulu K. Morolong & Bogadi Nage-Sibande

Open, flexible and online education is being adopted by institutions to enhance their efforts to achieve increased levels of access to inclusive learning opportunities. However, while the significant growth in online learning opportunities is acclaimed for breaking the

barriers for disadvantaged groups, this paper aims to assess the residual gender issues in this breakthrough. The paper recognizes the fact that in the context of the developing world, technology mediated teaching and learning is gaining currency especially in higher education. Using that context as its unit of analysis, the paper argues that still, there are gender inequality issues that stand in the way of potential achievements by technology mediated learning to close the gendered gap in access to higher education. That technology mediated teaching and learning has unique benefits for teachers and students is an established notion. What remains scanty is disaggregation of the benefits by gender, which is still a strong paradigm of exclusion in general, and in education in particular. While there is evidence to suggest that students benefit differently from technology-mediated learning, dependent on their gender, the paper aims to establish the extent to which this is the case in higher education. Focusing on the teacher, the central question that this paper seeks to answer is, what is the contribution of teachers to the gender gap in the benefits derived by students from technology mediated teaching and learning? The answers that this paper aims to generate, are expected to inform strategies that could be used to remedy the situation so that open, flexible and online teaching and learning can alleviate the daunting challenges of the persistent gender inequality in access to inclusive higher education

GENDER, SKILL DEVELOPMENT AND EMPLOYABILITY: THE CONTEXT OF OPEN AND DISTANCE LEARNING PERSPECTIVE IN INDIA

Bijaylaxmi Mohapatra & Sukanta Kumar Mahapatra

Skilled human resource is pivotal to social and national development. However, access to skill development opportunities is unequal across caste, gender and different socio-geographical locations. No doubt, various policies and five year plans in India emphasized upon expansion of skill development opportunities. However, the design and implementation of these programmes do not match completely to the needs of these groups and even the training provided to these clientele groups do not help them to avail relevant opportunities in the job market. The lack of gender focus in these schemes and programmes has resulted in lower participation of women in labour market and it has impacted in wide gender gap in various social and economic indicators. Stereotyped mindset with regard to education and employability of women and further unwillingness of the parents to invest on women's education has led to gender disparity in education and employment. It is often assumed that education; particularly in the area of skill development is a means of achieving gender equality or improving women's wellbeing. This paper reviews the policies and practices existing in National Institute of Open Schooling (NIOS) in India and how it has influenced in the improved enrolment of women in comparison to male in India in vocational education system. It also examines under what conditions women's education directly impacted employment pattern and improved their life pattern.

LEARNING HUBS HELP-ACCESS SECONDARY EDUCATION WITH INNOVATION

Bijay Nanda

With a large number of India's children attaining primary education, the demand for secondary schooling has increased considerably. A quality secondary education is said

to have positive effects on health, well-being and productivity. Therefore, scale-up of secondary education is high on the education policy and programme agenda with a mission to achieve universal access to secondary level education by 2017 and universal retention by 2020 in India. Many children are leaving the primary school without acquiring basic learning competencies, thereby making them unprepared for secondary education. In-service teacher professional development efforts are adhoc at best, classrooms/ teaching-learning facilities are poorly resourced, teachers sometimes lack conceptual understanding of subject matter and ill-equipped to deal with the complexities that the subjects present and there is over-emphasis on rote learning as opposed to developing students' higher order thinking skills. Compounding the challenges are social and gender disparities in access, quality and educational outcomes. To accelerate the educational attainment of ST&SC girl children at the secondary level, Odisha Government introduced an innovative initiative, which was an add-on incentive programme for ST&SC day-scholar girl students of class IX & X. Learning Hub was an experiment pilot aimed at improving the academic achievements of the students of class IX & X studying in two tribal dominant districts namely Koraput & Mayurbhanja of Odisha. The Learning Hubs are composite of 5-6 schools where one school acts as a hub linked with another 4-5 satellite schools. The Hub School is envisaged as digitally resource rich centres of excellence offering well planned range of pedagogic and other activities supporting enhanced learning outcomes for students. These Hub Schools are the centre for Teachers' capacity building, resource sharing, reflection and learning and the 'teaching-learning' activities with the students. This pilot experiment attained a visible success with 'teacher-student' active participation.

DISTANCE EDUCATION OPENS ACCESS TO EDUCATIONAL AND CAREER ADVANCEMENT: THE CASE OF COMMUNITY BASED WORKERS' CERTIFICATE PROGRAMME AT BOCODOL

Boingotlo Moses & Bantu L.K. Morolong

In its common usage in Education, the term access typically refers to the ways in which educational institutions through their policies strive to ensure that different sectors of the population have equal and equitable opportunities to take full advantage of their education. However, there is evidence that there are certain factors such as, race religion, and disability, past academic performance that may contribute to certain groups of people having less access to educational opportunities than others. This paper looks at the role played by Distance Education at the Botswana College of Distance and Open Learning (BOCODOL), which is to continually open up access to some of disadvantaged groups of the Botswana society through its accredited programs. In particular the paper presents a case of the Certificate programme for Community Based Work with Children and Youth (CBWCY). This is a programme that has been designed for people who work with vulnerable children and youth at community level mainly on a voluntary basis and most of them without any formal qualification for the work. While the Regional Psychosocial Support Initiative (REPSSI) and UNICEF ESARO designed the programme, in Botswana it is offered by BOCODOL through Distance Education and in partnership with the University of KwaZulu Natal (UKZN) in South Africa. Involvement by BOCODOL in this programme was a result of the realisation that the majority of the participants in the programme, despite their hard work and positive contributions to society, did not have formal qualifications on the basis of which they could develop a career in this field. This paper presents this case to share practical experiences and showcase a model that bears testimony to positive contribution by Distance education

in Botswana in opening up access to educational opportunities for those who have been disadvantaged by their different life circumstances.

A TRACER STUDY OF KOFORIDUA POLYTECHNIC ARTISANS GRADUATES

Buckman Akuffo , Samuel Okae-Adjei & Smile Afua Dzisi

Feedback in modeling is very crucial and educational institutions are not exempted. With the dynamic nature of businesses today, the development of technical and vocational education and training can greatly improve when periodic feedback is given to help shape the development and implementation of curriculum. After five (5) years of offering training and technical support to graduates in the informal sector in deprived communities, in Ghana, by Koforidua Polytechnic through the Institute of Open and Distance Learning, (IODL) with support from Commonwealth of Learning (COL), this paper traced graduates of the Artisan Programmes from 2010 to 2015. This was to help in generating relevant information that could be fed into curricula review to ensure that programmes offered meet expectations. Five hundred (500) graduates were randomly sampled from eight (8) deprived communities in the Eastern Region of Ghana of which 422 responded representing 84.4% response rate. Comfort of living, extent of material acquisition, available necessities of life, and increased self-confidence were some livelihood indicators used in the study. Results from the study revealed that 83% of graduates find the programmes highly beneficial because their skills have improved and seek to continue to the advance certificate. Again, the study showed that more than 70% of auto-mechanics, electricians, seamstresses, hairdressers and mobile phone repairers indicated that they urgently need further and modern training. Furthermore, over 80% of women and girls involved in the study indicated that their livelihood has improved tremendously after graduation and they were supporting their children education. The gaps identified by the study included the small component information communication technology in the curriculum of the Artisan programme. The study recommends, among others, that information communication technology component should be increased in the curriculum and the period of refresher training should be reduced from six months to three months.

LEARNERS' ON THE FACTORS AFFECTING WOMEN'S CAREER ADVANCEMENT

Chiam Chooi Chea

According to World Bank Report, female population in Malaysia was reported at 49.3% in 2016. Women play prominent role in today world because they carry variety of roles in the family, community and society levels. In the 1st Malaysia Plan (1966-1970), Malaysia government has incorporated women in the development of the country. Following the 5th Malaysia Plan (1986-1990) and the adaptation of National Policy Women in 1989, the role of women in development have been increasingly reflected. It is undeniable that women made significant contribution in the business industry; however gender inequality still exists in the labour force around the world. Nevertheless, the women's position in the labour market is much more disadvantageous than that of men. Women have smaller chances to be employed, starts a business or advancing in the career ladder. A total sample of 213 open and distance learning (ODL) learners in several private and public education institutions in Malaysia were collected in this study. This

study aims to investigate the learners' perception on the factors affecting women's career advancement using confirmatory factor analysis (CFA). The results of this study would be able to assist educators to fulfill their responsibilities to help all learners to develop their abilities and skills to create supportive industry environment for women. The results showed all the factors; character, lack of support, treatment and family issues in this study has significant impact on the respondents' perception. Meanwhile, educators will be able to review the course curriculum to better prepare graduates for the realities of gender empowerment in the workplace.

ODL, ICTS AND KNOWLEDGE SOCIETY: NEW ROLES WITH KNOWLEDGE GAPS AND POLICY APATHY IN INDIA

Debal K. SinghaRoy

India experiences phenomenal transition in her economic, technological, demographic and educational foundations in the wake of emergence of the knowledge society, penetration of Information and Communication Technologies (ICTs) and neo liberal globalization. Hence to suffice the increasing need for educated, skilled and trained man power the significance of Distance and Open Learning (ODL) and ICTs are emphasized by the state. However contemporary India finds not only gaps between policy resolution and policy execution, but also policy apathy on the ODL. In these backdrops this paper examines the changing technological, economic and socio-demographic contexts of functioning of the ODL system, highlights some key instances of policy gaps and apathy on the ODL system and implications of such gaps for the ODL system in particular and for society in general. The paper shows that though in last few decades India has seen rapid expansion of the ODL and ICTs, the state policies for ICTs enabled education, sustenance and recognition of this system has not been very forth coming. Rather there have been visible gaps and paradoxes those are widely reflected on the emphasis on the on line learning, MOOCS, blended learning etc, without elaborate policy for standardization and recognition of these arrangements, de-recognition of the Distance Education Council without making any alternative in its place, imposition of Choice Based Credit System on the ODL system without the consultation of the ODL teachers, indecision of the state on the research programme of the ODL system etc. These altogether contribute more to weakening than to consolidating the ODL system. The paper concludes that despite knowledge and ICTs revolution, the ODL system have widely remained side lined due to the gap between the policy formation and implementation of the same; and that such gap has widened by the reorienting the education system more to be a market driven projects than a socio cultural process.

INNOVATIONS IN ICT USE IN LIBRARY AND INFORMATION SCIENCE EDUCATION THROUGH DISTANCE MODE: AN EXPERIENCE

Dinesh Gupta

Library and Information Science Programmes in India are offered by more than one hundred universities/ institutions. The level of education varies from certificate programme at the lowest level to the research degree programs at doctoral Level at the highest level. Vardhman Mahaveer Open University offers variety of Library and Information Science Programmes and is leader in the programmes offered in Hindi language. The academic programmes offered include: Diploma in Library & Information Sc.; Bachelor of Library and Information

Sc; Master of Library and Information Sc; Certificate Programme on Digital Libraries (CPDL). The University has employed varied technologies to facilitate learners in starting from online admission to availability of courses material online, availability of question bank, previous year papers, internal assignments, online declaration of results, online check of progress of delivery of printed course material, etc. Brings out key features of the programmes that ICT uses in design, development and delivery for the CPDL. The present papers shares in detail about the technological applications in offering library and information programmes in the University which offers equity in access to the learners residing in remote locations for inclusion of diverse group of learners.

HARNESSING OPEN EDUCATIONAL RESOURCES FOR SUB SAHARAN AFRICA: THE LIBRARIANS' PERSPECTIVES

Edeama Onwuchekwa & Ukoha Igwe Igwe

As the world becomes more digitized and the production of information improves, there is an increasing need to make electronic resources available and accessible for learning through the information and communication technologies. UNESCO (2002) defined OER as "the open provision of educational resources, enabled by information and communication technologies, for consultation, use and adaptation by a community of users for noncommercial purposes". Open Educational Resources (OERs) provide strategic channel to access knowledge. This paper discusses the perspectives of librarians on OERs and their role towards providing access to knowledge. The National Open University of Nigeria (NOUN) is a single mode open and distance learning institution and has a population of 190,000 active students with 74 study centres. In March 2013, in a COL-ECOWAS-UNESCO-NOUN workshop on OER, the desire and interest on open access was stimulated. In collaboration with the United Nations Educational Scientific and Cultural Organization (UNESCO), Commonwealth of learning (COL), the National Open University of Nigeria (NOUN) established an OER/MOOC Unit in August 2014 to focus on OER related activities. This study also considers the extent to which OERs have been deployed in NOUN as the university is becoming an active player in the Open Educational Resources movement and librarians are not left out in the advocacy and information provision. In the world of exponential growth of information and the influx of technologies in diverse formats and changing role of academics, some of the questions that are considered in this study are: what role are librarians playing to provide accessible information? How can they bridge the digital divide in information provision in developing countries using OERs? What challenges do developing nations face towards harnessing and providing access to open educational resources for the academic community?

ASSESSMENT OF HIGHER EDUCATION ACCESS PARTICIPATION AND EQUITY IN TARABA STATE, NIGERIA

Elizabeth Sabo & W. D. Lamu

Establishment of the state and federal government institutions, agencies and donor funded projects created gaps in manpower need to deliver government services. Hence, steady rise in the number of applicants into higher institutions. The study investigated access, participation, equity and disparities in public higher education in Taraba state. The objectives are to evaluate the socioeconomic characteristics of the respondents, identify factors that limit access to higher

education, determine the effects of gender and religion on access, participation and equity in learning. Respondents were randomly picked from five local government areas. Structured questionnaire, interview sessions and secondary data were used to source for information. Data collected were analyzed using descriptive statistics. Findings indicated steady rise in number of applicants and enrollment into government owned university between 2009 and 2013. The state owned polytechnic recorded an increase in the number of applicants from 2009 to 2013, but decline in enrollment between 2009 and 2015. Enrollment in the state university by male applicant is four folds of the female applicants. In addition, female enrollment was higher than male in social science and education courses. On the other hand, enrollment by male was two folds of the female in science courses. Across gender, enrollment in the university peaked in art courses. High tuition fees, poverty, few vacancies in tertiary institutions and difficult academic requirements limits access to tertiary education. The disabled had limited access to higher education. Enrollment in the state university by disable candidates was zero, 25 male to 15 female) in state polytechnic, 4 male in the college of education and one male and one female in the college of agriculture. Admission into tertiary institution takes into consideration the geographic location and ethnic affiliation. The study recommends improve access by female and disable, equal opportunities, public enlightenment, inclusive and participation by stakeholders.

FROM POLICIES TO IMPLEMENTATION OF OPEN DISTANCE LEARNING IN RWANDA: A GENEALOGICAL AND GOVERNMENTALITY ANALYSIS OF WHAT AND HOW

Evode Mukama

The purpose of this paper is to analyse the interplay between policy formulation and implementation in terms of the present historical and cultural practices of open distance learning (ODL) in Rwanda. This paper draws from a genealogical and governmentality analysis proposed. The paper examines government aspirations as depicted in policy statements starting from 2001, a year aligning with the beginning of the Government of Rwanda's Vision 2020. This Vision aims at transforming the country from an agrarian to a knowledge-based and technology-led society. The analytical process is developed in conjunction with a scrutiny of perspectives underpinning the historical-specific relations of ODL implementation in higher learning institutions over the five years, namely 2012 to 2016. The findings reveal some clash of priorities between conventional and ODL programmes. Though policies extol ODL potential to increase access and improve quality in higher education, implementing institutions adopt a contentious approach to cope with a dual mode. The study suggests some ideas to close the gap between policy formulation and implementation.

ACCESSIBILITY OF HIGHER EDUCATION PROVISION IN THE OPEN DISTANCE AND E-LEARNING CONTEXT: A CASE STUDY OF THE UNIVERSITY OF SOUTH AFRICA

Gezani Baloyi

Higher education accessibility in South Africa and the global community is a topical subject. This paper focuses on the University of South Africa (Unisa) which is an Open Distance and e-Learning institution. Unisa has been mandated by the government of the Republic of South African to register a diverse student body which includes those who would not normally

be able to access higher education due to socio-economic circumstances. Therefore, Unisa is broadening the participation in higher education to include South Africans, other nationalities in the region, and people in global communities. This paper explores the access to and inclusion of students in higher education at Unisa by reviewing literature concerning Open Distance and eLearning in South Africa, regions and global communities. The paper addresses the following question: How is Unisa supporting students to access higher education in the Open Distance and eLearning context? The paper is designed to draw from quantitative data so as to deepen the understanding of access and inclusion in higher education. The researcher surveyed about 200 students registered for the signature module in the college of education at Unisa. Signature modules are compulsory online modules which are required of students at the college of education. The researcher made use of Garrison, Anderson and Archer's Community of Inquiry framework to study the case in-depth. It was found that Unisa uses technology innovatively to promote access of higher education even to students who are in remote areas. The institution is seen as the only hope of higher education provider to majority of students.

IMPLEMENTATION OF E-LEARNING IN NURSING EDUCATION IN MALAWI: THE CASE OF KAMUZU COLLEGE OF NURSING - UNIVERSITY OF MALAWI

Gibson Masache

Kamuzu College of Nursing (KCN) is a constituent college of the University of Malawi has two campuses in Lilongwe and Blantyre, separated by a distance of about 300 kilometers; KCN is the largest national producer of professionals in nursing and midwifery. KCN adopted an E-learning platform due to pressure to increase intake of nurses in order to meet the demand of the Malawi health. In response to the demand for nurses and midwives, KCN has resorted to increasing student in-take and in diversifying its post - graduate programmes including MSc Programmes and starting a PhD programme. This paper describes how implementation of blended learning using e learning to complement face-to-face teaching is able to improve teaching and learning of nurses in Malawi. An e-learning project has supported a blended learning approach to delivering undergraduate, postgraduate and CPD education in KCN through the introduction of e learning between 2006 and 2016. Through the project, a Student Management System and Curriculum Management System were established and were complemented by the initiation of capacity building through workshops on digital content creation, development of e-resources, ICT infrastructure improvements, making CMS and resources accessible to staff and improving internet connectivity. Results under the project include the local development of resources and KCN have developed in excess of 100 digital resources. ICT infrastructure improvements have done include the procurement of new high-spec servers, desktop PCs, resource repository, and CMS. CMS and resources are accessible to staff and students through the CMS via the intranet (internal network) which is fast, reliable and robust. In total, over 50 faculty members have been trained. Long-term sustainability is assured as facilitation of workshops, is done by local Malawi's faculty members; provision of existing digital resources from the University of Edinburgh with over 400 resources provided and include interactive computer-based tutorials, videos, quizzes, virtual patients etc. These are available from a local repository and made accessible to students and staff via a locally developed Curriculum Management System (CMS). There has also been staff development in new pedagogies, e-assessment (standard setting, writing good MCQs, writing effective feedback, assessing clinical skills, using e-learning and CMS most effectively. The process

of establishing e learning in nursing education can be very challenging. Using e-learning platforms requires investments in lectures education in ICT, availability of ICT resources like computers, and student's accessibility to IT use. Distance learning, creating full-fledged nursing education programmes, and linking the two campuses with clinical sites for clinical teaching using e-learning platform are the future plans for e-learning education in Malawi.

MAKING ENTREPRENEURIAL TRAINING AN EFFECTIVE COMPONENT OF OPEN AND DISTANCE LEARNING: THE CASE OF NATIONAL OPEN UNIVERSITY OF NIGERIA

Grace E. Jokthan

Entrepreneurs are frequently thought of as national assets to be cultivated, motivated and remunerated. In addition to creating wealth from their entrepreneurial ventures, they also create jobs and the conditions for a prosperous society. Entrepreneurship refers to the capacity and willingness to develop, organize and manage a business venture along with any of its risks in order to make profit. It refers to the ability to seek investment opportunities and establish an enterprise based on identified opportunities. It means the ability to develop a new venture or apply a new approach to an old business. The entrepreneurial spirit is characterized by innovation, risk-taking, and the ability to succeed in an ever changing and increasingly competitive marketplace. While many countries systematically and consistently groom entrepreneurs, entrepreneurs in Nigeria spring up on their own (despite the crucial role they plan in the survival on the nation). The state (and by extension the entire educational system) has a critical role to play in entrepreneurship drive through regulations which play a crucial role in nurturing entrepreneurship. The current government in Nigeria desires to accelerate massive employment and hopes to achieve that through self-employment. This paper examines the strategic initiatives of the National Open University of Nigeria through the Centre for Educational Technology and Entrepreneurial Development to integrate result-oriented entrepreneurial training into their undergraduate and post-graduate training programmes.

ANALYSIS OF E-LEARNING IN KENYA: ITS EFFECTS, PUBLIC-PRIVATE PARTNERSHIP, POLICIES AND FRAMEWORK

Grace Wanjiru Gakinya & Jefferson N. Kariuki

Kenya views the integration of ICT in education systems as an impetus to attaining the education Millennium Development Goals (MDGs) and Education For All (EFA). Kenya became the only African country to offer a 12 year free primary and secondary education. However, despite these impressive gains, this good initiative set in a problem of maintaining quality in education after access was drastically increased. Kenyan schools were left scrambling to deal with the influx of students, which severely taxed their infrastructure and supplies. Another serious implication of these problems was the shortage of textbooks. To counter these challenges and at the same time attain universal access to public schools, retention, and improved quality of education, the need to implement E-learning was a great option. E-learning, which can involve both teaching computer skills and using those skills to undertake distance learning, is set to become a critical educational tool in the education system of Kenya. This paper aims at analysis of e-learning in Kenya: access, effects, public-private partnership, policies and framework. The researcher used a qualitative study

based on a critical method design, secondary data from journals, articles, publications and other relevant documents. The study carried out content analysis by analyzing issues thematically. Through this method, researcher extends her positive evaluation of issues affecting e-learning in Kenya as a healthy judgment but rapidly offer measures through recommendations. This paper concludes that investment in e-learning allowed learning institutions to benefit from economies of scale and meet increasing demand for education closer to people. As Kenya's population grows, so are more students going to seek school admission but class room space will not grow at the same pace. E-learning education is likely to increase the flexibility of the education system in Kenya, thus enhancing access, inclusion and equitable educational opportunities. Leading universities and middle-level colleges in Kenya are increasingly using e-learning to remove geographical and financial barriers to higher education thus enhancing access. Challenges of introducing e-learning technologies in primary, secondary and higher education have necessitated the need of public-private partnership. Through public-private partnership e-learning will help attain the one of the education goals in the Country's Vision 2030, which is to provide globally competitive education, training and research for development. The paper finally concludes that Kenyan ICT looks towards providing sufficient and affordable internet infrastructure capacity to all secondary schools and tertiary institutions. Unfortunately education sector in Kenya lacks adequate connectivity and network infrastructure although a small number of schools have direct access to high speed connectivity through internet service providers. This paper recommends for E-learning programs should be expanded and advocated in order to enhance access, inclusion and equitable educational opportunities in Kenya. There is a need for public-private partnership as a way of build ICT infrastructure which will enhance e-learning. Finally policies of E-learning in Kenya should be fully implemented and challenges facing its implementation should be addressed accordingly.

COGNITIVE AND AFFECTIVE ENGAGEMENT IN A COMPARATIVE PERSPECTIVE: AN EVIDENCE OF FORMAL AND NON-FORMAL POST GRADUATE STUDENTS

Hamid Ali Nadeem, Ehsan Mahmood & Irfan Haider

This study aimed to determine and compare cognitive and affective engagement of formal and non-formal students* at post graduate level. The study was conducted in Federal College of Education Islamabad and four regions of Allama Iqbal Open University Islamabad. The study employed cluster sampling technique selecting all the 100 students of Federal College of Education and 400 students of AIOU Islamabad. Data were collected through Student Engagement Instrument (SEI) developed by Appleton (2010) administering directly to the students. The data were analyzed by using independent sample t-test to compare the mean scores of formal and non non-formal students. The findings revealed that formal students were found better in control and relevance of work load than non-formal students. Formal students created better relationships with their teachers than non-formal students. Formal students were also found better in getting peers and family support for learning than non-formal students. However, both categories of students showed same level of aspiration and future vision and extrinsic motivation.

SUSTAINABLE DEVELOPMENT OF RURAL WOMEN IN INDIA: ROLE OF LIFE LONG LEARNING FROM INCLUSIVE PERSPECTIVE

Hilaria Soundari

According Human Development report (HDR, 2015) which covered 188 countries across the world, India is ranked at 130. The lower status widely attributed to the rural India that comprises of 68.84% population who are deprived of ongoing learning. Their lower state of development have often evolved and persisted over a long period of time and may be associated with gender, ethnicity, indigeneity or geographic location. Most of these women in rural India face numerous and overlapping constraints on their ability to cope with setbacks. Inclusion of these women calls for universal access to basic social services, especially health and education; stronger social protection, including unemployment insurance and pensions; and a commitment to full employment, recognizing that the value of employment extends far beyond the income it generates. The main objectives of the study was to present the successful elements of Life Long Learning for Farmers (L3F) initiatives in the significant process of sustainable development, to trace out the barriers and bottlenecks of L3F initiatives in rural India and to identify the areas of further strengthening the effectiveness of L3F initiatives in sustainable development of rural women. The study is being done in Theni District of Tamil Nadu. The study also identified the requirement for basic education, technical skills, tailored training and above all engendering for rural women. Taking stock of the situation of rural women, the journey of sustainable development seems to be a long way. In this process, three elements i.e. education, employment, and emancipation of L3F can contribute substantially and strengthen the process of sustainable development.

IMPACT OF FLEXIBLE SKILLS DEVELOPMENT COURSES ON AUCHI POLYTECHNIC CATCHMENT AREA

Imanah Joseph Edeki

In Auchi Polytechnic, Flexible Skills Development is a "step down" of an aspect of INVEST Africa initiative of the Commonwealth of Learning (COL). For over 3 years, management of Auchi Polytechnic has been facilitating the informal sector courses. The aim is to provide ACCESS and all INCLUSIVE skills training that will impact positively on the hitherto neglected 47% illiterates in the informal sector population within her catchment area (South - South Zone of Nigeria). The informal sector courses in 3 major areas are: Fashion & Clothing Technology, Information & Communication Technology and Small Scale Business Technology have a total enrolment figure of 157 and graduate turn-out of 33 since inception. The 2007 National Population Census put South - South Geopolitical zone population figure at 21,014,655. Within the zone, Edo State where the Polytechnic is situated is 3,218,332. Edo North which is the Polytechnic immediate community has a population of 804,583. The impact of FSD in the neighbourhood in terms of enrolment stood at 0.00090%, 0.0059% and 0.0240% for South - South zone, Edo State and Edo North respectively. The percentage of graduands with respect to South - South, Edo State and Edo North is 0.00022%, 0.0014% and 0.0058%. These figures represent little or no impact on our efforts at reaching out to the informal sector. Going at this pace, it will take 22,792,816,154 years, 515,664,543 years and 32,413,200 years to achieve 100% enrolment of the 47% illiterates in the informal sector population within South - South Geopolitical zone, Edo State and Edo North Senatorial district respectively. These figures show apathy on the part of informal sector populace towards the programme.

Reasons for the apathy have been attributed to “wait and see” attitude of what the certificate to be issued will lead them to; society low level impression of the learners in the programme as never do well; and lack of adequate and sustained institutional support to both learners and facilitators. This paper therefore, determines the relative impact of the flexible skills development scheme and explains the reasons for apathy observed.

IMPROVING HIV SERVICE EFFECTIVENESS AND EFFICIENCY THROUGH THE USE OF OPEN LEARNING IN GHANA

Jedidiah Koomson

Shortage of critical service providers, especially in HIV management is a major challenge in the implementation of effective HIV programs in some regions in Ghana; especially the Central region. This paper describes how non-technical staffs were trained through open learning to solve a point of care service deficit at no economical cost to the nation, yet improving quality HIV care service within two years (2012-2014). A selected peer group of the clients, and midwives were trained at no cost to themselves to provide various HIV services for HIV clients in remote and inaccessible areas. The competency areas were: client's data recording, issuance of drugs and medications, encouragement for observance of appointment booking, treatment initiation and completeness. Using open education approach, flexible learning modes such as role plays, case studies, brainstorming, acting, behavioral assessment, situation analysis, discussion, in addition to lecturing and social media, their capacities as service providers were enhanced. The political support came from the local governmental authorities and the traditional chiefs; who were especially willing in providing lunches and snacks during the training, and showing the sense of solidarity that HIV infected persons have common equal rights. This initiative increased the number of staff providing laboratory services in HIV management from 120 to 950, with 252 trained client peer service providers supporting. The service provider to client ratio index which was as low as 1:10 since 2006, became 1:3, for the first time in two years (2012-2014), eliminating the problems of burnt-out and heavy workload burden; making HIV care highly improved. Client's waiting time was reduced; physician and high technical staff time for clients was freed to provide service in other areas. HIV staff motivation improved and service provider job satisfaction appreciated. Open learning is very necessary to facilitate balancing the scales in favor of HIV service providers' effectiveness and efficiency to achieve results based outcomes for HIV prevention and treatment.

OPEN EDUCATION FOR HOME BASED CARE OF CHILDHOOD MALARIA: AN EFFICIENT BUT NEGLECTED STRATEGY

Jeremiah Koomson

Childhood malaria is a major public health problem in Ghana, and community participation continues to be a wishful thought that it can be utilized to eliminate shortage of service providers so that health care quality could be assured. This paper is assessing the outcomes of an initiative to use open learning to promote quality home based care of malaria in a remote district (Assin South District) in Ghana. Methods: 378 community health workers trained 3203 community members concurrently in separated sessions to provide home based care of childhood malaria in 2014. Using open learning approach, the sessions were

handled through the use of local language. Previous knowledge on malaria and educational status were not considered for inclusion. The will to learn to provide the service was enough. The teaching and learning materials used were developed by the trainees through collaborative learning among themselves. Case studies on real life situations of childhood malaria were used for effective reflection and appreciation. Topics treated included: the use Rapid Diagnostic Test, Artemisinin Based Combined Therapy, Oral rehydration therapy, fever reduction, risk assessment, early reporting and treatment. Results: Ten months after the community training, 62% of the 22,585 cases of malaria recorded at the health facilities in the district in 2015 were treated at home, making a greater saving on time and economic resources. Quality health assurance blossomed and many vulnerable children received healthy life assurance and vitality. The productivity level of the community improved appreciably, and the outcome caused this training model to be an entry point for many health initiatives. Conclusion: Every community is full of essential human potential and when well harnessed the benefits shall far outweigh the inputs made into it as an economic adventure, irrespective of the weighting one may place on it.

BRINGING LEARNING CLOSER TO THE WORKPLACE: AN ONLINE COURSE FOR LIBRARIANS IN DEVELOPING COUNTRIES

Joanna Wild, Ravi Murugesan, Veronika Schaeffler & Anne Powell

Face-to-face training workshops are frequently used in a capacity development context. However, the workshop approach has its limitations as the application of learning in practice can only happen once the learners are back at their workplaces. Unfortunately, once back at work, participants are often pulled into day-to-day responsibilities and rarely get immediate opportunities to apply their learning, and knowledge gained from the training is lost as the time passes. Therefore, we decided to redesign a workshop on Monitoring and Evaluation of Electronic Resource Use (MEERU) – an important topic for university libraries and librarians – from a face-to-face workshop into a fully online course. Our goal was twofold: to train more librarians in INASP's partner countries in the developing world, and to support an immediate application of learning in the workplace. We used a learning design approach to put the learners' needs and experience at the heart of course development. We situated the learning in the librarians' work context through a careful combination of interactive 'guided readings', activities for discussion and reflection, and a course assignment structured in parts so that the learning from each unit could be immediately applied in practice. The course was piloted for eight weeks in May to June 2016 with 23 librarians from five developing countries. Here we present the approach to the course design, the evaluation outcomes, and lessons learnt.

IMPROVING ACCESS TO POSTGRADUATE TRAINING IN CROP PROTECTION FOR AGRICULTURAL PRACTITIONERS THROUGH DISTANCE LEARNING AT THE UNIVERSITY OF NAIROBI, KENYA

J. W. Muthomi, A. W. Mwang'ombe & F. M. Olubayo

The Department of Plant Science and Crop Protection of the University of Nairobi launched the first postgraduate training by distance learning in 2010. Development of the Open and Distance Learning (ODL) mode of delivery was based on client-driven demand for a flexible mode of learning by agriculture graduates who had specialized in Crop Protection at final

year at undergraduate and holding management positions in horticulture industry. This demand was necessitated by the requirement by public and private sector employers that professionals at management positions should have advanced training and skills in order to satisfy the increasingly competitive job market. However, the employers are unable to grant study leave for workers to pursue postgraduate training. Therefore, the ODL mode of delivery was developed to open up opportunities in postgraduate training in Master of Science in Crop Protection. The ODL programme was initiated in 2008, starting with review of curriculum to accommodate open and distance learning mode. Academic and technical staff were sensitized on the need for ODeL mode of postgraduate training. Many feared that it would not be possible to deliver a science-based programme by distance learning due to the practical component involved. The new training approach focused on distance learning based on provision of hard copy manuals because many of the potential students worked in the agriculture sector and most stations were located in rural areas without stable cell phone and internet connectivity. The first ODL intake was launched in October 2010 with a class of 13 students. Every year the programme admits over 15 students and at the beginning of each academic year, the new students are inducted in to the ODL mode of training. The main medium of instruction is the print in the form of self-instructional modules. These serve in the place of the teachers as they contain the subject content and instructional devices to guide learners. To support the printed modules, academic support services are provided by face to face tuition sessions held during the semester. The face to face on campus sessions are dedicated practicals, tutorial sessions, continuous assessments, presentation of term papers and consultation with supervisors on thesis research. Through the ODL mode of delivery class sizes have increased from five to about 20 students per intake every year. The approach has maximized the use of limited physical and human resources and significantly reduced the unit cost of postgraduate training. The new frontier is to convert the programmes to full e-delivery since internet connectivity has improved in many parts of the country.

GENDERED MICRO POLITICS: EXPLORING THE CONVENTIONAL AND ODL ACADEMIC SYSTEMS IN SRI LANKA

Kanchana Bulumulle

Research evidence demonstrate women's disadvantage in higher education; in academic ranks (Morley, 2005), positions of authority held and academic promotion (Probert, 2005). Within this discourse of disadvantage, studies particularly point to everyday academic life practices of gendered micro politics that act as significant drawbacks to women's advancement especially within conventional higher education system. These are practices of repression that include both open (overt: direct physical, verbal) gendered practices of elimination from opportunities of academic privilege in academic life, as well as formal university policies which are overtly gendered. The covert forms, on the other hand include, the subtle less obvious socio cultural practices and ideology that act to undermine women's academic advancement more generally. Hence, the current research is an ongoing study that attempts to compare the Sri Lankan conventional and Open and Distance Learning (ODL) experience of gendered micro politics. It particularly attempts to determine its role and relevance within the Sri Lankan Open and Distance Learning set up at the Open University; a National University governed by the same legal regulations as the conventional system. The methodology is qualitative and ethnographic. The sample consists of male and female academics of both conventional universities and the ODL Open University in Sri Lanka. The data pertaining to the conventional system has been already collected using the life history

method while the ODL data are collected through in-depth interviews. The paper seeks to present an analysis of the relative academic progression of male and female academics and the relevance of gendered micro politics in their stories of academic advancement. The findings indicate that within the conventional system, repressive subtleties of gendered micro politics exist and act to suppress female voice in everyday academic life and appointment into higher decision making levels, while more informal cultural norms of dress codes and gendered norms of social mobility prevent some women's research achievement. The analysis further seeks to know whether and if so, how gendered micro politics configure in the ODL system and compare with the specificities of the conventional academic system.

GOOD PRACTICES IN THE TEACHER EDUCATION PROGRAMME FOR CURRICULUM DESIGN AND LEARNER SUPPORT SERVICES OF KRISHNA KANTA HANDIQUI STATE OPEN UNIVERSITY

Kanta Chakravarty

Krishna Kanta Handiqui State Open University, the first and only state Open University in North Eastern part of India has been conducting a two-year Diploma in Elementary Education (D.El. Ed.) programme through distance mode to enhance continuing professional development of the elementary teachers of the state of Assam since 2012. All teachers trainees enrolled in this programme are deputed by the Assam Government under the Sarba Siksha Abhiyan Mission which is a central government project to train the primary level teachers of India. The course curriculum of the D.El.ED. programme has been designed with a definite end in mind guided by the objectives of the programme. Workshops and various school-based activities have been introduced as part of the material design for a better understanding of various pedagogical concepts. Along with the printed study materials, the University has been preparing audio and audio-visual resources related to the course material to make the teacher trainees compatible with learners' different interests. This paper seeks to address the good practices of curriculum design and planning and learner support services.

GIRLPOWER

Kaprie J. G. Thoronka & Paul A. Bangura

Girl Power Project is one of ChildHelp Sierra Leone activity that empowers girls dramatically to improve the wellbeing of their families and their communities changing lives in society.

Objective: To end early child marriage through open and distance learning for 2106 girls aged 10-18 years within 12 months, in 18 proposed communities in Bombali and Kambia districts, bounding Guinea where the outbreak was high.

Donors: Global Giving UK/USA, Anne Frank Fonds, Indiegogo, One percent Club and Go Fund Me.

Activities in 4 different phases include:

1. Introduction to Girl Power: ChildHelp worked with communities, created positive learning environments where girls stayed well, learn, and excel during the outbreak. Learning materials distributed to girls with recaps to facilitate discussion and understanding of essential social survival skills in: Personal Empowerment, Peer Pressure, Communication Skills, Puberty and Understanding Our Bodies, Violence against Girls.
2. Developing Mentors: The same identified girls were reached with the curriculum which dives deeper into: Healthy Relationships, Sex Education, HIV/AIDS Awareness, Rights and Responsibilities, and Leadership.
3. Camp Girl Power: 380 Excelled girls in the first two phases are selected by their peers to participate in Camp Girl Power in advanced workshops, Role Playing, Mutual Problem Solving and Mentoring, to demonstrate and reinforce their skill sets, celebrate their achievements, and connect with each other at Camp. Camp graduated girls are equipped to share their knowledge and skills with girls in their school and community.
4. Mentoring in Practice: Each Peer Mentor returns home to empower other community to know their rights and teach their girl-peers on decision making about their minds, bodies and futures through: Life Skills, Healthy Relationships and Healthy Bodies and Minds.

Our Results: Empowered girls dramatically improve the wellbeing of their families and their communities. 2106 girls' at the most critical juncture of their lives were targeted. Girls' equipped with skills to avoid early pregnancy and disease. Girls' voices and rights are respected. ChildHelp team has seen no dropouts, no pregnancies and no child marriages among the nearly 2106 girls who have gone through comprehensive beta tests of The Project phases as this project is replicated in other districts.

OPENING ACCESS TO EDUCATIONAL TECHNOLOGY: THE CASE OF TEACHERS IN SWAZILAND

Karen Ferreira-Meyers

After the successful completion of a pilot study in 2013, a group of researchers, with the help of the Institute of Distance Education (University of Swaziland) and the Commonwealth of Learning (financial support) widened access to educational technology using the distance mode. This activity was undertaken between January and June 2016. In this paper, the author critically analyses the advantages and disadvantages of using the distance mode to assist in teacher professional development. 63 teachers successfully completed the pilot study on educational technology concepts and applications. In 2016, more than 500 primary and secondary school teachers from the four regions of Swaziland were brought together to benefit from a distance education teacher training program. The results of an opinion test administered to all completing participants will be discussed in view of improving their experience and offering yet another higher quality OER in a possible next series of training via distance mode.

EXPANSION OF COMPETENCY BASED SKILLS TRAINING FOR THE NEO-LITERATES THROUGH TECHNOLOGY ASSISTED COURSE MATERIALS: PERSPECTIVE BANGLADESH

Khan Shahnewaz

Bangladesh, a predominantly agriculture-based developing country has a population of approximately 160 million. About 88% of around 49.5 million total labour forces are engaged in the informal economy. Low level of skills among the labour force is one of the fundamental constraints for high productivity. It is estimated that around 40% of the total labour force in Bangladesh lacks minimum level of education and possesses little to no skills. At present, capacity of the TVET system of Bangladesh is inadequate to address the huge demand of skills training. A framework for implementation of skills training following NTVQF has not been fully introduced yet at all levels by all skills training providers. It is recognized that state provisions alone cannot satisfy the increasing demand for vocational skills. In Bangladesh private training providers make up 96% of total TVET institutions and enrol about 75% trainees. Most of the private training providers lack competency based training materials and competent trainers to organize local level training courses. To enhance capacity of the private training providers for delivering competency based quality skills training, DAM in cooperation with COL developed three “Basic Trade Certificate Course”. The three course materials on “Beauty care”, “Garments Machine Operation”, and “Karchupi” were developed based on identified market demand. These consists of 3 “Training Manuals”, 3 “Handbooks”, and 118 “Video Clips” on process demonstration. Course materials were developed keeping consistency with Pre-Vocational Level 2 of the NTVQF. This provision allows trainees to enter into formal TVET programmes. On the other hand trainers can strengthen their skills and techniques by following the training manuals, instructional video clips and handbooks. This technology based innovative training material is first of its kind in Bangladesh. Three course materials are available online as OER and helping private training providers of Bangladesh to deliver quality skills training.

PREVENTING CHILD, EARLY AND FORCED MARRIAGE THROUGH OPEN, DISTANCE AND TECHNOLOGY-BASED EDUCATION AND TRAINING: VISUALIZING PROCESS AND IMPACT TO DEVELOP AN INSTITUTIONAL FRAMEWORK FOR MANN DESHI FOUNDATION

Kuntal De

Despite repeated efforts by the Government and civil society organizations, inclusiveness in education remains a hurdle in India. The problem multiplies when it comes to girl children’s education. Enrollment in primary education does not align with the ground reality and contexts. For many communities’ schools become irrelevant, who prioritize survival over general knowledge? Our primary target was to reach the migratory communities living in the fringe of villages. Not having a permanent address and short presence in the region makes the girl children and young women vulnerable to early marriage. The approach needed a different orientation. Opportunity cost of education was pivotal in the whole process and ODL, with a multiple delivery mechanism grid could address the contextual learning needs. Measures of creating a grid system of technology aided delivery stage were designed; the technology selection was based on sharing stories of each other. The facilitators and the learners needed to participate in developing project framework. Most of them face a situation of rekindling hope in each other even before they participated in the

process design. Visuals and storytelling were only way. The primary task was to inspire the participation. An approach of using visuals to share stories using suitable technology was used to approach the communities and developing framework. Applications like Whatsapp worked as a vehicle for sharing community's response and inspire others to participate. Visuals were used as communicate clarifying deliverable, time frame and strategies. It is necessary to simplify and adapt a storytelling based, visual approach and form a suitable delivery grid to reach the unreached. The visual approach aids sharing of concerns, broader goals with implementation team. The participatory approaches started with inspiring the communities and ingrain transparent sharing of process; visuals become promoter of intention; the approach aids in uniform understanding all across.

EFFECTIVENESS OF DIGITAL GAMES FOR INCLUSIVE EDUCATION- A CASE STUDY OF LEARNERS WITH INTELLECTUAL DISABILITY

M. Rajesh, Sindhu. P. Nair & V. T. Jalajakumari

Intellectual Disability is a condition diagnosed usually before the age of 18 years, and mostly in infancy or prior to birth, that includes below-average general intellectual function, and a lack of skills necessary for daily living, making them apart from other aspects, slow learners. Identifying a suitable pedagogic process for the intellectually disabled is an enormous challenge for education systems across the world and India is no different. Carefully calibrated digital games have emerged as an interesting mechanism through which basic educational comprehension can be nurtured in such learners, while improving their span of attention. The present paper proposes to study the suitability of Moodle based Games in enhancing the learning outcomes of intellectually disadvantaged learners. Four Moodle Based Games namely, Snakes and Ladders, Crosswords, Hangman and Millionaire will be administered to approximately 50 Intellectually Disabled Learners from various age groups. Games will be designed based on the syllabi transacted in the Special Schools. Learning outcomes would be analysed on various parameters in comparison with the attainment of the learners in traditional classroom settings. Apart from Intellectually disabled learners, the results of the study are expected to provide insights into the use of games in general contexts as well.

STUDENTS AS PARTNERS IN EDUCATIONAL REFORMS: DEMOCRATIZING POST-SCHOOL EDUCATION

Maitumeleng Ntho-Ntho

Students bring to their learning environment a diverse range of backgrounds, experiences and expectations. When some have few formal qualifications, others have none and begin their post-school journey unprepared for the independent, self-directed learning that awaits them. When these dynamics come together in a distance learning environment where students are physically separated from teaching and support staff as well as from other learners; the isolation, coupled with a weak sense of connection to the learning community evidently describe their struggle to maintain their motivation and engagement in learning. Resultantly, they develop lower self-concepts, achieve less academically, and end up dropping out of studies. Nevertheless, the very individuals, whom the distance learning policies, curriculum and procedures are meant for, do not have a voice when decisions pertaining to these important reforms are made. Literature on student participation

underpinning this paper highlights positive outcomes from involving students as partners and decision makers in their education. The aim of this conceptual paper is therefore to advocate for student participation in decision making where their distance learning is planned, reviewed and implemented. More specifically, the argument informing the paper is that it is not only possible to do so, but absolutely necessary, in terms of the international Conventions and Protocols that students are also “rights holders and those who facilitate their rights are duty bearers,”. The paper further recommends that attention be given to research on distance learning and that, students, as the “now” leaders, be more involved both as active researchers and research participants rather than passive beneficiaries of distance education. In so doing, we path student’s greater participation when decisions about education at local, provincial and national levels are made.

THE PERCEPTION OF STUDENTS ABOUT THE COST OF STUDYING BY OPEN AND DISTANCE LEARNING: CASE OF THE UNIVERSITY OF GOROKA

Martin Otto

The paper will present an aspect of a research done in Papua New Guinea (PNG). The study focused on the “Cost of studying by distance mode – Students Perspective”. The main attention is culture as a pivotal aspect to everyday decision making in Melanesia. The study ascertained that social elements in Melanesia are driving the way of life in general. It therefore defines how people behave and respond to certain issues. In Melanesia scarcity of financial resources does not necessarily mean the absence of money. What it means is when priorities collide; family and cultural obligation take the upper hand leaving not enough to pursue Open and Distance Learning (ODL) study. In PNG the social pressures and cultural connections and values continue to influence pathways and decisions among cultural and tribal members. Therefore, for an ODL student to make the choice to pay for his or her fees mean she or she has to sacrifice his or her social obligation, which is unpopular. It does not even help when financial resources are not made available to ODL students in terms of scholarship and tertiary loan scheme. Thus, the bulk of the population who wish to study by the ODL mode continue to miss out expanding the gap between the high and low class in the income earning graph. ODL providers again are not helping since the delivery mode is being seen as an entity to generate the ever declining government annual subsidy. The data for the research was collected from semi-structured questions among the University of Goroka (UOG) distance learning students.

ENVIRONMENTAL EDUCATION AS A TOOL FOR SUSTAINABLE DEVELOPMENT: CASE STUDY OF LEKKI-LAGOS

Maureen Chukwu & Samson Kadafur

The study examines the strength of environmental education in Lekki-Lagos and its impact on community and grass-root development by considering a targeted sample population comprising some respondents that are living or working in Lekki community in Lagos. A qualitative survey was conducted using participatory observation, interviews, and a structured questionnaire. The questionnaire was validated through peer review and pilot testing. Data collected were summarized and computed using descriptive statistics and a paired

t-test. Results showed that 92% of the respondents affirmed that environmental education impacted positively on the community attracting the government, non governmental and private organizations to help in developing the area through construction of roads, pedestrian bridges, drainages and sea embankments thus reducing flooding, man hour loss due to traffic jam and rate of pollution. There was also a decrease in loss of lives and properties. Investors were attracted to Lekki, reducing poverty and social imbalance thus increasing community development. There is a significant difference between the state of Lekki now and before the intervention of public-private practice in developing the area ($P < 0.05$). It is recommended that the government and other stakeholders should collaborate on a higher scale to enhance developing the unreached communities.

OFFERING TVET COLLEGE LECTURERS INCREASED ACCESS TO PROFESSIONAL QUALIFICATION PROGRAMMES THROUGH A NATIONAL OPEN LEARNING SYSTEM IN SOUTH AFRICA

Michael Adendorff & Christina Van Wyk

South Africa is building an expanded, effective and integrated post-school education and training system that is responsive to the needs of individuals and the country. One of the highest priorities of the Department of Higher Education and Training (DHET) is to strengthen and expand the public Technical Vocational Education and Training (TVET) Colleges and turn them into attractive institutions of choice for school-leavers. This priority necessitates strengthening the capacity of TVET College lecturers and giving them access to high-quality professional qualification programmes through a semi-open learning system that will enable them to complete their studies without having to absent themselves from their colleges, or travel to distant universities (many TVET College campuses are situated far from the main centres). This paper reports on a DHET project with a three-fold developmental aim: (i) to significantly enhance the professional capacity and pedagogic competence of TVET lecturers, and to do so by (ii) building the capacity of universities to provide TVET College lecturers with accredited professional qualification programmes using appropriate open learning approaches, and (iii) establishing a national open learning management system for post-school education and training. The project calls for collaboration among universities aimed at cultivating a strong understanding of open learning principles and methodology, and at developing their administrative, course-building and materials development capacity. Though limited in scope at this stage, the project is seen as a prototype of a large-scale open learning system that will serve the entire national post-school education and training domain in South Africa. The project is still in the early stages of development, and the paper will highlight the conceptualisations, challenges, solutions and innovations that are emerging.

OERS IN A COMPETENCY BASED ENVIRONMENT: FOSTERING ACCESS AND INCLUSION IN VANUATU

Michael Coghlan

Vanuatu has recently implemented a new competency based vocational and training system under the new Vanuatu Quality Framework. As a consequence many of the training materials currently in use in Vanuatu need to be adapted to fit into the new quality framework. At the request of the Ministry of Education the Commonwealth of Learning has been working

with staff from a secondary technical college to adapt existing OER materials in Small Engine Maintenance for this purpose. It is intended to supplement the new materials with video footage of practical tasks. The resulting OER materials will be available to TVET staff throughout Vanuatu, the wider Pacific and beyond, and can be used as a model for developing other vocational materials that should afford greater access to quality training, and allow vocational students to be included in the new national training system. This paper will discuss the benefits of creating OER materials in the context of access and inclusion. It will also highlight the challenges of adapting existing training materials for a competency based environment, and the advantages of providing supplementary video materials.

HOW CAN ODL AND TECHNOLOGY CONTRIBUTE TO INCREASED ACCESS ON TEACHER TRAINING AND OTHER PROGRAMMES?

Mmabaledi Seeletso

This study is about perceptions and experiences of learners pursuing a Master of Educational Leadership (MEDEL) programme delivered using blended teaching and learning that leverage on ICTs. Most learners are practising educationists enrolled at the Botswana College of Distance and Open Learning (BOCODOL). A mixed methods approach was adopted for this study. Learners were interviewed and a questionnaire was administered to establish the extent to which ODL and ICTs contributed to increased access on training by MEDEL learners. Key issues for data collection included experience regarding the use of tablets, electronic content, general perceptions and experiences on internet connectivity, online support, online interaction with tutors and other learners, as well as assessment. Progression at work due to enrolment in the programme was another issue for data collection. Descriptive statistics and thematic interpretation were used for data analysis. The study has revealed that learners had improved their ICT competencies and have also accessed quality training that contributed to their professional development. Findings suggest that using tablets to package content instead of print study materials has encouraged learners to use ICTs. Learners used tablets for various purposes including studying online, doing their assessment, sending their written assignments, as well as receiving their marked assessments from tutors. Overall, the integration of ICTs in teacher professional development was perceived positively and their experiences revealed that they had not only developed as people, they had also developed professionally as they acquired the necessary ICT skills and competencies needed for the knowledge society of the 21st Century. This study also speaks to sustainable development goal number 4: Ensuring Inclusive and Equitable Quality Education and Promotion of Life-long Learning for All. It is recommended that a longitudinal study be undertaken to further explore the impact of integrating ICTs to access learning and in professional teacher development in the entire country.

IMPACT OF LEARNERS' ACCESS TO TECHNOLOGIES AT BANGLADESH OPEN UNIVERSITY

Mohammad A. Mannan

Bangladesh Open University (BOU) - only provider of open and distance learning (ODL) in the country - deploys technologies in its educational delivery in accordance with the government's short and long-run educational and development policies. To support government's promise

to achieve digital-Bangladesh agenda and Sustainable Development Goals (SDGs), BOU has initiated a shift from traditional ODL to ICT-enabled ODL through learning management system (LMS), web2 technology, webTV, webRadio, eBooks and mobile apps. This has created a level-playing-field for providing second chance education and lifelong learning opportunities within the digital environment. BOU caters all sections of workforce through eLearning and/or ICT-enabled programmes where broadcast, computer and mobile technologies are extensively used. The current research deploys content analysis and uses data on students' views to assess impact of technologies on BOU learners. The instrument covers data on the digital version of programme delivery such as LMS, e-Book, on-line information through mobile apps, webTV, and webRadio. A total of 256 students (139 male and 117 female) took part in this study. The findings provide strong support and encouragement for BOU to incorporate ICT in the academic programme delivery as the mobile internet users in the country are gradually increasing in size.

SOLAR-POWERED FLOATING SCHOOLS IN FLOOD-PRONE BANGLADESH: AN INCLUSIVE AND SUSTAINABLE SOLUTION TOWARDS GREATER EQUALITY

Mohammed Rezwan

One fifth of Bangladesh floods annually during the monsoon season, but extreme floods cover up to two thirds. In recent years, the flooding has become more severe. During the monsoon period, thousands of schools are forced to close, and many children miss school days. Due to socio-cultural norms, the majority of rural adolescent girls are faced with the reality of early marriage that restricts their access to schooling. Shidhulai Swanirvar Sangstha came up with a creative solution to these problems and introduced 'floating schools' to the students in 2002. The idea was to 'combine a school bus with the schoolhouse, and use the local boat to create a floating space' to ensure access to basic education at doorsteps. The school-boat first serves as a school bus, collecting children from riverside stops; then it docks and class begins. The boat is solar powered, allowing the school to have an internet-linked computer, which makes learning more interactive and easier for children from disadvantaged backgrounds. The organization also runs a fleet of boats that serve as libraries and adult education centers, where parents and villagers receive training nutrition, health and hygiene, sustainable farming and adaptation to climate change. The boats use a blended approach of face-to-face and technology integrated learning. To combat discrimination and unequal opportunities for women, boats teach girls on additional skills and their rights to education, choices and opportunities, prevention of child, early and forced marriage. The project encourages parents to send girls to schools, while raising awareness on women's decision making power and mobility, and increases capabilities of disadvantaged young women for better livelihoods and economic opportunities. This paper is discussing the floating school case study, sharing the origin, concept, achievement, challenges and replications in other flood-prone regions where they are having a transformative impact upon education and communities.

GIRLPOWEREMPOWERMENT

Mutale M. Kapyanga

What happens to one group of women affects us all. In today's intricately interconnected global world, it's no longer "us and them". According to the United Nations, educating and empowering

women and girls is the key to breaking generational cycles of poverty, disease, abuse and illiteracy around the globe. When we empower girls with critical life, business and leadership skills, they: + Experience better nutrition and improved health; + Marry when they want to and become mothers when they're emotionally, physically, and financially ready; + Help create stable families and provide the next generation of children with more chances for education and opportunities for a better life; + Start businesses that raise economic productivity and help build critical infrastructure such as water systems, roads, hospitals and schools; + Shape culture and become respected members of societies that can thrive on their own, without outside aid. Our Girl Power Project is a path to empowerment. The 2014 - 2016 programs teaches critical life and business skills to 100 promising adolescent girls in Lusaka, Zambia, aiming to give them a foundation from which they can grow into leaders who can run businesses, rebuild infrastructure, and forever transform their communities, their economies and their culture. Training is done under trees in different communities to empower girls, and the ripple effect has the potential to create 10,000 female leaders in Zambia who are committed to a self-sustaining Africa. The train last for 5 days in a week for 2 years which has ended successfully.

USING A CONSTRUCTIVIST APPROACH TO DEVELOP SELF-LEARNING MATERIALS AND PROMOTE LEARNER ENGAGEMENT FOR OUT-OF-SCHOOL CHILDREN IN SRI LANKA

Nanda Wanniarachchi

Addressing the issue of access to quality education is a matter of urgency, and yet the formal education system has not tended to provide education for all. For out-of school children, therefore, distance and open learning methodologies have been adopted by developing countries as an alternative path to address their educational needs. The challenge is how to bring them back to the learning process again and how to motivate and engage them for active learning. The purpose of this study was to investigate how constructivist approach and principles support for the development of self-learning materials that promote learner engagement and motivation of out-of-school children. Utilising case study method the research was carried out. Ten course writers and ten out-of school children were selected through purposive sampling as participant and target group of this study. By conducting training program made the course writers aware of constructivist approach and assisted those to develop skills of writing learning activities embedded constructivist design principles. At the end of the training program the course writers tested the sample materials developed with a targeted group of out-of-school children. The data were collected using multiple data gathering techniques and results were presented as individual stories of the children. The overall findings have provided conclusive evidence that constructivist approach and design principles do support the creation of active, constructive and meaningful learning and learner-motivated learning materials. The findings indicate that this type of material was practical and meaningful and students were excited when they were learning what they deemed relevant. The materials were able to engage the students in a continuing learning process and they were successful in integrating the whole environment into students' learning, successfully providing multiple avenues and multiple resources for students' learning processes. The study concludes with a recommendation for a paradigm shift in educating out-of-school children - a shift from traditional instructional design methods to a constructivist approach.

THE LEARN TO LEARN ONLINE MOOC: SUPPORTING NOVICE ONLINE LEARNER DEVELOPMENT

Nathaniel Ostashewski, Martha Cleveland-Innes, Dan Wilton & Nancy Parker

This paper presents findings of a mixed methods study on the experience of novice learners in a MOOC designed to build skills for successful online learning. The Learn to Learn Online (LTLO) MOOC, a five week course delivered in the Canvas platform, has been delivered in 2015 and 2016. This paper describes the intentions of the design team and the participants, the pattern of interactions through the initial and second revised offering, and retrospective perceptions of the course. Utilizing the Community of Inquiry (Col) in regards to design and delivery resulted in the identification of ways in which to support quality delivery of a MOOC. The ongoing efforts to improve and humanize the design approach in the LTLO deliveries, which included common features found in both cMOOCs and xMOOCs, resulted in adjustments for the second offering of the course to better support a nascent Col and address some of the unexpected dimensions in the initial 2015 offering. Findings related to the MOOC design point to ways in which design and delivery of MOOCs may utilize the Col framework. Preliminary delivery findings indicate that learners who responded to the survey were very satisfied with the course design and enthused about online learning after their LTLO experience. Learners expressed how the course has enabled them to continue to develop and explore online learning and to integrate it into their own educational practices. Outcomes of this research point to ways in which MOOCs, designed using a Col focus, can be developed in scalable ways while maintaining meaningful and quality delivery for learners.

DEVELOPMENT OF LEARNING BUFFET MODEL FOR OPEN AND FLEXIBLE LEARNING

Nurkhamimi Zainuddin, Musa Ahmad & Rozhan M. Idrus

Open and Flexible Learning is an excellent method of reaching all types of learners. It is truly a medium that helps to democratize education to all. Today, we are currently experiencing a time of constant evolution in the field of education in which students require more resources and tools to obtain the information and construction of knowledge. One such resource is the use of open and distance learning environment, where the lecturer assigns additional activities for the understanding of the concepts seen before. But there are times when the student does not understand the content because of the form it represents, making it necessary to have more options to facilitate the understanding of content through different ways that may be more attractive to the students, achieving more active participation in the subject and an affinity that leads to a better learning experience. This is the goal of the study, which proposes a model called "Learning Buffet Model" for designing Open and Flexible Learning content adaptable to the student's learning style. This learning buffet model can be used as a fundamental model and applied in any area or discipline of education as it forces the consideration of four components (learning style, content, pedagogy and technology) in the design of the lesson plan and subsequently enrich the learning environment with more specific learning objects the subjects taught.

E-LEARNING AS A PANACEA TO EXCESSIVE DEMAND FOR TERTIARY EDUCATION IN NIGERIA: A CASE STUDY OF i-learn PLATFORM OF NOUN

Nwamaka Patricia Ibeme

Access to quality tertiary education in Nigeria has been militated against by poor infrastructural and political development to the effect that the ratio of the few candidates who gain entry to the conventional universities is usually one hundred students to a lecturer (100:1). Numerous problems such as under funding, unprecedented industrial unrests, cultism and violence, staff and students misconducts etc makes learning environment un conducive thereby resulting in diminished access and acquisition of quality education. The National Open University of Nigeria (NOUN) was established by the Federal Government of Nigeria to make quality and affordable university education accessible for all who seek knowledge. This study examined the role of and impact of e-learning on the efforts to address the rising enrolment pressure facing higher institutions of learning in Nigeria, with special focus on the i-learn platform of NOUN. The methodology of the study comprised survey research and review of related literature. Structured questionnaire was used to collect data from 215 respondents sampled from NOUN. While Arithmetic Mean was used to test the four research questions, simple Regression Analysis was used in testing the two hypotheses that guided the research. It is the findings of the study that NOUN's i-learn platform has significant impact on the efforts to address the rising demand for tertiary education in Nigeria, particularly in the areas of registration, provision of virtual classroom, reduction in the workload of teachers, and enhancing the ICT technical and pedagogical skills of teachers, support staff and the university in general. It has equally helped in bringing out the best practices in giving quality education to more learners irrespective of location and time. Finally, the paper recommended increased investment in procurement of the necessary gadgets and equipment of the e-learning system, training and re-training in ICT skills and pedagogy, and above all cooperation and collaboration with relevant bodies within and outside Nigeria.

INCREASING WOMEN ACCESS IN TVET THROUGH ODL PROGRAMME: A CASE OF THIKA TECHNICAL TRAINING INSTITUTE IN KIAMBU COUNTY , KENYA

Pauline N. Chege & J.N Kariuki

Statistics from Thika Institutional sex disaggregated baseline survey (2014) clearly showed that 65% were males and 35% were females. This clearly shows there is a gap as far as women participation in technical education is concerned. Few girls enrol and complete technical education than men. Therefore, the purpose of this study is to find out the successes of ODL programme in increasing women access to technical education. Some of the specific objectives of the paper include: finding out causes of low female participation in TVET, examine ODL programme in skills training for the formal sector and non-formal sector. Further, the study will examine challenges and solutions of implementing ODL programme for skills training. Data will be collected using desktop research and participatory discussions with the heads of department, FSD champion and departmental FSD champions. The participants cut across the mainstream academic departments. The findings and recommendations will assist in enhancing female participation in technical education hence address the problem of female disparity in TVET institute.

THE DEVELOPMENT OF OPEN EDUCATIONAL RESOURCES (OER) FOR THE CARIBBEAN VOCATIONAL QUALIFICATION (CVQ) ASSESSOR TRAINING

Pauline Whiteman, Frances Ruffin & Wendy Mcclean

OER has the potential to reduce costs and increase access to training which ultimately lead to increased participation rates in developing countries. The aim of this project is to develop OER for CVQ assessor training using a collaborative approach. CARICOM Heads of Government agreed on the establishment of the Caribbean Single Market and Economy (CSME) as one of its response to the challenges and opportunities presented by the global economy. One of the changes brought about by the CSME was the introduction of the CARICOM Certificate of Recognition of Skills Qualifications (CARICOM Skills Certificate) which allows a CARICOM National who possesses a CVQ to move and work freely within the region. The revised CARICOM Regional Strategy for Technical Vocational Education and Training (TVET) endorsed the CVQ as the TVET credential in CARICOM and identified as key action items, inter alia, the implementation of the CVQ in all institutions and the development of training programmes for TVET instructors and assessors according to approved competency standards. The implementation of the CVQ requires adherence to quality assurance mechanisms inclusive of assessor training and certification based on the Regional Competency Standard Assessment Level IV. Persons identified as assessors and verifiers for the CVQ are required to attend an in-service, 30 hour training workshop at a cost. The development of OER for assessor training will involve collaboration among Caribbean National Training Authorities (NTAs) to develop e-learning materials for CVQ assessor training under an open license which will be freely available for use by any institution in the Caribbean. A survey instrument was developed and circulated to relevant stakeholders to determine the feasibility of the project and to assist in designing the online programme. This project has the potential to standardize and increase access to assessor training and reduce costs associated with the implementation of the CVQ. The online assessor training will also be accessible and relevant to all training institutions that utilize the Competency-based approach to assessment.

REALIGNING TVET INSTITUTIONAL E-LEARNING TECHNOLOGIES TO COMMUNITY'S SME'S DEVELOPMENT IN KENYA:

Peter Rubia Njoroge Kamau

Kenya's development emanate from skill development and technological transfer. Therefore, TVET Institutes are depended upon to train and improve skills amongst the community's SME's. However, digital E-learning methods are inadequate. Globally, (SMEs) promote rapid economic growth and equitable sustainable development at the grass root level. SMEs play an important role in the Kenyan economy. The Economic Survey (2006) suggests that the sector contributed to over 50 percent of new jobs created in the year 2005. Objectives of the study:

1. To establish the extent to which cost effectiveness of E-learning technologies affect community's SME's development in Kenya.
2. To determine the effect of E-learning technologies accessibility on community's SME's development.

3. To assess the extent to which E-learning usability affects community's SME's development
4. To investigate the effect of E-learning technologies flexibility on community's SME's development.

Despite their significance, past statistics indicate that three out of five SMEs fail within the first few months of operation in Kenya (Kenya National Bureau of Statistics, 2007). Adequate entrepreneurial skills and good financial management skills are necessary for development and growth of SMEs. This can be promoted by embracing open educational resources at TVET institutes, realigned to community's SME's development. The study employed quantitative and qualitative approach. Data used was collected by use of interviews and questionnaires and analyzed using descriptive statistics. Correlation was employed to establish relationship between E-learning and development of community's SMEs. The survey strongly shows that SMEs desperately need E-learning technologies since they have a strong bearing on their competitive edge and survival.

EDUCATIONAL TECHNOLOGY POLICIES IN INDIA AND ACCESS

Prabhakar Rao Jandhyala & Siva Prasad Rambhatla

It is usually understood that policy defines the course of action to attain particular outcomes. Policy outcomes, in turn, are mediated by institutions. Policies deal with multiple arenas and education is one among them. There have been number of policies that have brought in many changes in the systems of education management, including curricula and use of technology. The Indian national educational policy of 1986, which was subsequently modified in 1992, stressed the need for using Educational Technology (ET) to improve access, quality and governance of education. Two Central government schemes have emerged out of these policies. They include ET and computer literacy and studies in schools (CLASS). These two important initiatives led in 2004 to another policy called information and communication technology (ICT) in schools. The ICT role in education continued to get the attention of the Government of India. In 2005 two policies were framed: 1) National Curriculum Framework and 2) SarvaSikshaAbhiyan (SSA) for universal secondary education. The main objective of all these policies is to create an environment for optimal utilisation of ICT in education. In continuation to this, there have been quite a few changes introduced to effectively implement enhanced technology in teaching and learning to increase the access at all levels of education. The present paper focuses on the analysis of educational technology related policies formulated by the Central and State governments in India. It also deals with the strategies and institutional mechanisms that are available to effectively implement these policies. This would contribute to reflecting and modifying the existing educational policies to address the current needs. This has greater implications for promotion of equity, access and sustainability in the arena of education

MOOC ON INTEGRATED PEST MANAGEMENT (IPM): A NEW ONLINE VENTURE IN AGRICULTURAL EDUCATION SYSTEM

Prabhuraj A., Patil B. V., Bheemanna, Prabhakar T. V. & Neeta Singh

A massive open online course (MOOC) is an online course aimed at unlimited participation and open access via the web. In India, MOOCs in engineering and basic sciences are being successfully developed and offered by national institutes like IITs and IISC under the NPTEL

programme funded by MHRD. There are very few MOOCs that are in the sector of agricultural education, whether in India or globally. Considering the huge potential and popularity gained by the MOOCs, an attempt was made in developing MOOCs in agriculture in collaboration with IITK (<http://www.agmoocs.in/>) during 2016. The response was overwhelming. MOOC on "Integrated Pest Management (IPM)" was designed and offered by UASR (<http://www.agmoocs.in/ipm/>). It was an eight week course (Jan.11 to March 11 2016) offered online on the platform (MOOKIT) developed by IITK targeting students and faculty of State Agriculture Universities (SAUs) across India. Over 2800 students, faculty, extension professionals and research scientists had registered the course. Attendance, views on the video lectures, participation in the general/subject forums were monitored online. The course consisted of series of video lectures released at the rate of 5-6 per week along with respective lecture notes and PPTs. The performance of participants was assessed through two quizzes and an assignment released online during the course period. Participants who have scored more than 7.00 points out of 10.00 were awarded performance certificate. Of the total registrations, 19% of the participants could obtain performance certificate which is higher than average compared to MOOCs offered in other fields. A survey of learners at the close of the MOOC showed that over 65% participants rated as high the quality of course material, relevance of quizzes/assignment, ease of learning and knowledge of instructors in the subject. Over 42% participants opined that, more and more such courses in agriculture should be launched which benefits diverse student and faculty community. In our paper, detailed information about the course design and the pedagogy will be given. We will also present data from the learning analytics to demonstrate how the faculty adjusted the topics and schedules dynamically in response to data available in the course space.

HOW "OPEN" IS OPEN SCHOOL IN INDIA? A LEARNERS' PERSPECTIVE

Puja Minni, Padmaja Pancharatnam, Shobhita Rajgopal & Jyotsna Jha

In India, both national and state governments, provide opportunities for Open and Distance Learning through National Institute of Open Schooling (NIOS) and State Open Schools (SOS). These have been designed as affordable, flexible and accessible systems, keeping in mind, those from disadvantaged sections. In this paper, the relationship between the intended flexibility and accessibility of the ODL systems within India and currently enrolled learners' use of these facilities is being examined. Through this analysis, we compare the national and state level systems across two Indian states so as to compare their functioning within each state and across both states. Through a socio-demographic profile of learners, it is also assessed whether these systems overcome barriers of accessibility and resource constraints or not.

EXPERIENCES OF ADULT LEARNERS ON USING THE MOODLE LEARNING PLATFORM

Regina Mpingana Shikongo & Agathe Lewin

Nowadays, many educational institutions are using Moodle (Modular Object Oriented Dynamic Learning Environment) as a tool in their teaching and learning environment. This tool aims to increase access to education especially for adult learners through distance education. According to the UNESCO Education for All Global Monitoring Report 2015, access to education is still a worldwide problem due to the complex nature of inequalities

associated with gender, ethnicity, wealth, and location (UNESCO, 2015). This paper aims to narrate the experience of adult learners based in Windhoek, Namibia, who have used the Moodle platform to do an online course in distance education with Athabasca University in Canada. An explorative and narrative research design was employed. A purposive sampling method was used to select the study sample. Data were collected using interviews and recording the narrative stories of adult learners on their experience with the use of Moodle platform. Content analysis was used to analyse data. The study describes the life experience of adult learners before, during and after the course. The study revealed that Open and Distance Learning (ODL

INTERCULTURAL COMPETENCE DEVELOPMENT FOR OPEN AND DISTANCE LEARNING

Robert Aucoin & Ining Chao

Open and distance learning, by nature, is a cross-cultural endeavour as many programs cross national and cultural boundaries to reach students. Inherent in this type of programming is the goal to educate global citizens who have intercultural competence to work with people from all around the world, and to allow for international collaboration that promotes mutual development. It is then crucial to ensure that students' intercultural competence is the foundation for open and distance learning, and that faculty and staffs also have the necessary intercultural skills to implement such programming. This paper outlines the needs for intercultural competence development at different levels for each of the stakeholders. For example, faculty members are responsible for curriculum and teaching; therefore, faculty development must address their needs to design intercultural course content and to implement culturally inclusive teaching strategies. All open and distance learning should result in a heightened awareness of one's own cultural orientations, and enhanced capacity to work effectively in intercultural settings. This paper maps a comprehensive framework and advocates a deep and experiential approach to intercultural competence development. It also includes a discussion on the intercultural issues resulting from the use of technology in open and distance learning. Specifically, the goals of the paper are to demonstrate:

1. The need for intercultural competence development, specific to students who are learning to become global citizens;
2. The need for intercultural competence development, specific to faculty who are the drivers for internationalizing curriculum and teaching;
3. The need for intercultural competence development, specific to staff who are supporting students in their learning journey
4. Examples of training workshops, some face-to-face and some mediated by technology
5. Curricular, pedagogical, technological, and administrative challenges and outlook for intercultural competence development in open and distance learning

PROSPECTS OF STRENGTHENING THE URBAN DISASTER MANAGEMENT CAPACITY THROUGH ODL METHOD: ROLE OF BANGLADESH OPEN UNIVERSITY

Saima Ahmad

The geo-environmental position of Bangladesh made the country prone to different types of natural disasters like – seasonal heavy rainfall and normal flood, land slide, erosion of rivers and coastal areas, northwesterners, tornadoes and cyclones associated with storm surges, deforestation, droughts, earthquakes, excessive salinity, arsenic contamination in ground water, heat wave, cold wave, long term water logging, land slide and many others. The global warming, sea level change, effects of El-Niño and La Nina along with the inclusion of Bangladesh into the seismic vulnerable zone has turned the country prone to recurring natural disaster. Amongst all, the magnitude and frequency of natural calamities in the urban centers of Bangladesh has increased many times in the last few decades. Specially, the two prime urban centers like- Dhaka and Chittagong are densely populated, with congested and unhealthy residential areas, insufficient roads and communication facilities, poor infrastructural facilities, least pre & post disaster management capabilities. However, in the last one decade (2005-2015) the disaster management context in Bangladesh experienced a successful 'Paradigm Shift', which refers to a move from a focus on relief and rehabilitation to a focus on disaster risk reduction (MoDMR, 2015). Nevertheless, further research and analysis has to be done to link between risk reduction activities and improvement in community's disaster resilience. This growing awareness of the concerned authorities revealed that, the risk reduction practices have to be improved from the local communities up to the Government in bottom-up process. The programmatic manifestation of this is the Comprehensive Disaster Management Programme (CDMP) run jointly by the MODMR and DDM of Bangladesh Government. However, the NGOs and other institutions are also focusing upon the disaster risk reduction at the local level. In reference to the institutionalization of different government and public organizations, the present research attempts to portray the prospects of the Bangladesh Open University (BOU) in strengthening the urban disaster management capacity in the country. The research aims at formation of a group of urban disaster volunteers. The increased awareness, knowledge and capacity of coping with the inevitable disasters, development of 'pre & post disaster management' skill in the urban areas of Bangladesh through BOU are the main objectives of the study. The different teaching methods such as, conducting face to face classes, tutorial classes, providing printed materials and e-books, developing and broadcasting formal and informal programs based upon the curriculums of different subjects offered at BOU as well as about diverse national and international issues through electronic media like- National TV and radio, web TV & Web Radio, internet, cellular phone etc. These options of delivering knowledge have developed an extensive network to disseminate knowledge to its huge number of learners. The learners of all the urban area Study Centers of BOU can be developed as urban disaster volunteers in a more comprehensive way by utilizing the vast information network. Strengthening the urban Disaster management capacity through ODL is very prospective and opportune mechanism in the contemporary world of increasing natural disasters. Bangladesh Open University, the only Open and Distance Learning (ODL) method public university, offering a wide range of degrees on different subjects in a highly skilled network of communication has every opportunity to develop a well trained group of urban disaster volunteers in our country in a shortest possible time.

TECHNOLOGY FOR ENHANCEMENT OF INTERACTIVITY IN TEACHERS' EDUCATION THROUGH ODL IN CONFLICT CHALLENGED AREAS

Sai Iorvaa Peverga

The challenge in providing education in conflict challenged areas has featured prominently on the list of problems menacing the world. In recent times, the task of producing teachers in areas affected by armed conflicts has been identified as a major challenge confronting the educational sector in Nigeria. Since the experience of the Nigerian civil war between 1966 and 1968 educational activities in every part of Nigeria has moved on uninterrupted in the face of communal, ethnic and inter-religious conflicts. Until recently, the Boko Haram terrorist group has disrupted educational activities for more than two years in the North-Eastern states of Nigeria. This has made Open and Distance Education programme become the only strategy for teachers education in those states. This paper, first, scrutinises the role of Open Distance Learning in the production of quality teachers in conflict challenged areas. It places emphasis on the mandate of The National Open University of Nigeria (NOUN) for the production of qualitative and quantitative teachers in Nigeria. Second, it discusses the characteristics of Open and Distance Education in teachers training. It also does an appraisal of students-teachers' perception about the study materials and the notion of interactivity/facilitation in Open and Distance Education pursued in NOUN. Finally, it recommends that the Nigerian Ministry of Education to enforce the use of the new technology of "i-learn platform" among the Nigerian institutions that provide teachers' education through the ODE mode. This will go a long way to enhance interactivity in teachers' education through the Open and Distance Education programme in conflict challenged areas in Nigeria.

PROMOTING LEARNING FOR PERSONS WITH DISABILITIES THROUGH THE USE OF INCLUSIVE TECHNOLOGIES

Sasae Walter

The UN Convention on the Rights of Persons with Disabilities Article 9: Accessibility, entails that people with disabilities have the right to access all aspects of society on an equal basis with others including Information and Communications, and other facilities and services provided to the public. In January 2015, UNESCO and UNICEF together with national partners launched the first Policy meeting for the implementation of a joint project on the use of inclusive technology for persons with disabilities. The project is funded from the UN Partnership to Promote the Rights of Persons with Disabilities funding framework. The major objective of the project is to strengthen the policy environment and build institutional capacities through Inclusive Technology to ensure Inclusive Education and Access to Information. The adoption of Inclusive technologies can extend to all educational opportunities to marginalized groups; increase education quality; and reduce inequalities based on gender, class, race, age and disabilities. This paper will focus on Samoan young learners who are disabled. It contains only those on the autism spectrum, including some who are dyslexia and others who have Asperger's syndrome. The first part of this paper will look at the current learning environment for the selected disabled learners. The second part will focus on the enhanced digital and computerized environment, and the impact it generates and produces to learning and performance of the learners. As part of the study, we will investigate the performance of the learner when given access to technology on both a controlled environment and one which is accessible at any time. As been proven by Sir

Timothy John Berners-Lee, "The power of the Web is in its universality. That is access by everyone regardless of disability is an essential aspect."

ACCESSIBILITY STRATEGIES FOR MAKING MOOCS FOR PEOPLE WITH VISUAL IMPAIRMENTS: A UNIVERSAL DESIGN FOR LEARNING (UDL) PERSPECTIVE

Sindile Amina Ngubane-Mokiwa

Massive Open Online Courses (MOOCs) were designed to enhance access to education to all that desire it. The open access drive seeks to promote free and equitable access to basic, higher, formal and informal education. The main aim of MOOCs is to de-institutionalize education moving it from the formalized class to the open platform where there are no admission requirements. The second aim of MOOCs is to provide access to lifelong learning for those who want to learn for the sake of knowing and developing their competencies. The objective of this document analysis based paper is to analyze primary qualitative-research academic sources dealing with strategies to make MOOCs accessible to people with visual impairments. This paper uses Universal Design for Learning (UDL) principles as a lens through which accessibility of MOOCs to people with visual impairments is examined. The document analysis involved a careful examination of research methodologies that had been used to gather data. Fifteen academic sources were sought through formidable search engines. Specified inclusion and exclusion criteria were used to select the articles that were analyzed to answer the research question: What accessibility strategies can be employed to make MOOCs accessible to people with visual impairments? Lastly, recommendations are made towards making MOOCs more accessible for people with visual impairments.

ACCESSIBILITY AND QUALITY EDUCATION OF PERSONS WITH DISABILITIES IN INDIA: AN OPEN SCHOOLING PERSPECTIVE

Sukanta Kumar Mahapatra

Recently under the Sustainable Development Goal 4, all the countries including India are mandated to achieve the goal to 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 by 2030(4.5.) and 4.a: build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all. Various countries including India have taken proactive steps and mobilized huge resources for achieving Education for All by 2015. There were some policies and programmes devised to meet the goal of Education for All. However, the goal is still elusive. In this context, it is important to note how these children with Disabilities can be streamlined in the system of education, particularly through open schooling system. The paper discusses how NIOS as one of the largest open schooling system, has used various strategies for providing accessible and quality education for Persons with Disabilities (PwDs). NIOS emphasizes on using Media and ICT support both in academic and evaluation system, recognizing and accommodating learners' needs and interests to provide them the quality education. The paper recommends for awareness and collaboration not only to provide accessibility but also to improve the usability of services rendered to the learners so that the goal of equitable participation of persons with disabilities in education can be ensured.

SOFT AND HARD ONLINE LEARNING AND COURSE FACILITATION SKILLS: CASE STUDIES OF COL'S TVSD TEACHERS AND MANAGERS ONLINE COURSE

Sunday A. Reju & Clayton R. Wright

This conference paper reviews the online training and facilitation experiences of different cohorts of a technical and vocational skills development (TVSD) course delivered by the Commonwealth of Learning (COL) to technical and vocational education and training (TVET) teachers and policy makers in Africa and the Caribbean. The course helps teachers and managers grapple with the bigger training issues as well as how to employ flexible and blended (FaB) learning to overcome barriers to enrolment and access to skills development. Using participation data from the African cohorts (2012 - 2016) and the Caribbean cohorts (2015-2016), the paper appraises some online asynchronous sights and sounds from the course discussion forums, and discusses the online throughput to investigate mixed learning experiences that seem typical of trainers and managers in tertiary institutions. Findings from the course throughput reveal the importance of facilitation skills needed to keep online learners within the confines of course learning outcomes. This conference paper investigates online learning and facilitation skills, termed soft and hard skills. Hard skills are skills where the "rules stay the same" regardless of which circumstance or cohort of people we interact with. In contrast, soft skills are flexible skills where "the rules change" depending on the circumstance, institutional culture or people we interrelate with. These definitions are relevant to both learning and facilitating engagement in the COL flexible skills development (FSD) online course. This paper outlines some online course design, delivery and facilitation strategies for online learners (and facilitators) similar to those who participated in the COL TVSD course.

ELEARNING FOR THE DEVELOPING WORLD - REACHING THE UNREACHABLE

Suresh Munbodh

Technology has changed the shape of the world. However, the developing world has been slow in adapting to the new technology. The cost of benefitting from such technology is decreasing but is still not within the reach of the small and poorer developing countries. All technologies developed rely on electricity for their operation. To benefit from such technology access to electrify is essential. That had slowed down the provision of education to the rural poor who have a high rate of illiteracy which is associated with a poor quality of life and a poor environment. Up till recently, the provision of electricity to the distant places was very expensive as the grid had to be extended to those regions through lengthy and costly cable networks. However, to-day with development of solar energy using the photovoltaic and the micro-grid technologies, distant villages can be supplied with electricity independently of the main grid. The poor and illiterate can thus have access to radio and TV broadcast, mobile telephony; etc. Facilities for eLearning can also be made available to the inhabitants. It is felt that the interactive eLearning platform, which is costly, can be provided by the Commonwealth of Learning and it can be used by the member countries to upload their own contents and provide eLearning to their populations. Such an initiative will make it possible to reach the unreached and reduce the cost to educate the rural poor who can contribute better to the development of the country and the improvement of the quality of life.

USAGES OF TECHNOLOGY TO DELIVER HEALTH EDUCATION PROGRAMS TO ENHANCE THE HEALTH STATUS OF BANGLADESH

Sharker Md. Numan

Health education is a broad, multi-dimensional and well-discussed issue in developing countries. The ultimate goal of development is to improve the quality of life and to providing education for all. Bangladesh is a populated country and the number of qualified doctors is 53063, registered nurse 26899 and several thousand allied health professionals have been serving about 160 million people of Bangladesh. The doctor-population ratio is 1:4719 and nurse-population ratio is 1:8226. It is unfortunate that the formal health education system and existing manpower is not enough to provide health services to the large segment of population, particularly the poor and the deprived. Long-term health manpower planning is lacking and manpower strength is inadequate in Bangladesh, whereas, limitation of infrastructure and resources are an important problem for health educational program. It assumed that health education and family welfare makes important contribution to poverty alleviation developed the individual and community's health status. Distance education and online learning is therefore, considered as supplementary, complementary, supportive and alternative to formal education. The nature of the information age and communication are changing rapidly. Interactive distance and online learning can reach more learners in more locations with fewer instructors. This paper focuses on health education program that is offering successfully by Bangladesh Open University (BOU) such as "Bachelor of Nursing Program" which has tremendous effort in the health sector of Bangladesh. Around 2000 nursing graduates' from BOU have been engaged in teaching, policy-making and holding higher position in health sectors whom are contributing a lot to enhancing the health status of Bangladesh. The success of nursing program encourages BOU to offer "Primary Health Care" and "Masters in Public Health" programs as well as delivering a "Non-Formal Health Education Program" by using technology/e-Learning to change the view of mass people concerning the several health issues.

INAUGURATING THE USE OF OPEN EDUCATIONAL RESOURCES AT THE UNIVERSITY OF SWAZILAND

Shokahle R. Dlamini

Textbooks are important teaching and learning resources in Higher Education Institutions. At the University of Swaziland, both lecturers and students pay for their textbooks. Over the years, the cost of textbooks has been increasing significantly making access to prescribed textbooks a luxury afforded only by a few students who are sponsored by the Swaziland government. In the phase of an increasing cost of living coupled with dwindling government scholarships, the only viable option UNISWA is left with is that of using Open Educational Resources. Through a generous grant from the Common Wealth of Learning (COL), in October, 2015, the University of Swaziland (UNISWA) held a series of workshops aimed at sensitizing the UNISWA community about, amongst others, the benefits of OER. The main objective of the paper is to explain compelling reasons for the use of OER at UNISWA. It also demonstrates the varying levels of sensitization, among the UNISWA academic staff and students, on OER and their potential to promote access to and enhance the quality of education. The paper further shows the various attempts UNISWA as an institution has done to encourage the use of OER by its academic staff. One of these attempts is the drafting of the UNISWA OER policy,

an exercise that started on March 14, 2016. This paper goes on to discuss the challenges UNISWA has faced in the course of developing an OER policy. It further suggests how the use of OER could revolutionize teaching at the University. To do that, In-depth interviews were conducted with a few respondents representing the three campuses to ascertain their feelings, perceptions and attitude towards the use of OER at UNISWA. In addition, to that two focus group discussions were held to elicit further responses on this issue.

ACCESS AND INCLUSION THROUGH OPEN EDUCATION RESOURCES IN BOTSWANA

Stanslaus Modesto

This Paper investigates the implementation of Open Education Resources (OER) in education as a much-talked-about problem that is not much in evidence in practice among institutions in developing countries. Inspiration for this paper was drawn from the initiative by the Virtual University for Small States of the Commonwealth (VUSSC), a Commonwealth organization that, among other objectives, gives guidance about OER. The Paper shares initiatives by the Botswana College of Distance and Open Learning (BOCODOL) by answering these questions:

1. How has the institution gone about the uptake of OER in the Botswana education context?
2. What challenges have been faced in the educational initiative?
3. iWhat impact has the initiative of offering OER programmes had?

To answer the research questions, documents on enrolment over the past four years were analysed, and these yielded quantitative data, showing statistics of enrolment by gender and the demand for the programmes. The sequential explanatory design was used, starting with quantitative data on enrolment statistics, followed by qualitative data derived from interviews of key stakeholders, namely, students, lecturers, and government officials. Some of the findings were that there is a high demand for the new programmes, with more females than males enrolled, and that the College was unable to meet demand due to under-funding. This led to a number of conclusions and observations including lessons learnt. These included researched evidence on how BOCODOL leverages on OER under guidance of the VUSSC, as well as showing that despite constraints, the effort yields positive results. This is a recommendation that comparable institutions in the small states of the Commonwealth could emulate.

MOOCS AS PROVISIONS IN GRADUATE EDUCATION FOR FUTURE PROFESSIONAL DEVELOPMENT

Sólveig Jakobsdóttir, Grímur Bjarnason, Kristinn H. Gunnarsson & Dóra D. Kristófersdóttir

In this study, we report the experiences of embedding MOOCs in a graduate course on distance education at the University of Iceland - School of Education 2014 and 2016.

Students evaluated MOOCs and their participation. The participants in 2014 were 17 and in 2016 23. They signed up for a MOOC of their own choice most for the first time. In the spring 2016 a phone survey was conducted with the 2014 participants (77% participation rate). In addition students from the 2016 cohort (57% participation rate) completed an online survey. Students were mostly positive, experience was described for example as fun, interesting, and a new way of learning. However, some mentioned that the courses they took were too easy for comfort, included “parrot learning”, that the learner environment lacked a personal contact and was non-comparable to f2f courses. Workload during the project varied and may have been too little for some students. About 81% felt that taking a MOOC had benefitted them: Directly in their work for review or learning something new; to experience that form of learning; ideas for future practice; some had already started using what they learnt, in their immediate practice. About 85% thought it likely they would sign up for MOOC courses in the future. About half of each group had signed up for at least one other MOOC. Many were interested in Icelandic MOOCs as students (70%), teachers (54%) or designers (36%). It worked well to embed MOOCs into a university course with opportunities for f2f meetings and requirement for group work in relation to the MOOC participation. There were indications that the experience opened doors or gave graduate students ideas in relation to their future or immediate teaching practice and professional development. More attention is needed to work load. Language is an issue and development of open online courses should be considered at the national or local level open to particular language groups that can include more relevant content for the participants.

THE JOURNEY OF SWAYAM: INDIA MOOCS INITIATIVE

Uma Kanjilal

Under the ‘Digital India’ Initiative of Government of India, one of the thrust area is ‘Massive Online Open Courses (MOOCs)’. Ministry of Human Resource Development, Government of India has embarked on a major initiative called ‘Study Webs of Active Learning for Young Aspiring Minds’ (SWAYAM), to provide an integrated platform and portal for online courses, covering all higher education, High School and skill sector courses. SWAYAM is an indigenous (Made in India) IT Platform for hosting the Massive Open Online Courses (MOOCs). To improve Gross Enrollment Ratio (GER), from 20% at present to 30% by 2020 SWAYAM promises to be a possible solution with a capacity to revolutionise the education system in India. The journey of SWAYAM can be traced back to 2003 with the initiation of the NPTEL (National Programme on Technology Enhanced Learning), a joint programme of IITs and IISc. This was the first major attempt in E-learning in the country through online Web and Video courses in Engineering, Science and humanities streams. The launch of the National Mission on Education through ICT (NMEICT) in February 2009 further broadened the scope catering to all disciplines in the Higher Education sector. As on date under the NMEICT huge amount of e-content have been generated which are available under the CC- BY- SA license. NPTEL has developed e-content for 933 Courses, Consortium of Educational Communication (CEC) for Undergraduate subjects in 67 Subjects, University Grants Commission (UGC) in 77 Post Graduate subjects. Similarly, many other institutions have developed e-content in different disciplines at different level. Under the SWAYAM initiative all the contents developed under NMEICT are being repurposed and being made MOOCs compliant. The Beta version of SWAYAM was made live on August 15, 2016. The paper provides an insight into the SWAYAM initiative and reflects on the issues and challenges in its implementation the Indian context.

THE COMMONWEALTH SCHOLARSHIP COMMISSION: OFFERING FUNDED OPPORTUNITIES THROUGH DISTANCE LEARNING

Vanessa Worthington

The Commonwealth Scholarship Commission's Distance Learning programme commenced in 2002, by offering scholarships for Master's study within the developing Commonwealth provided by a UK University. Since its establishment, we have offered 2,400 scholarships with over 1,300 Graduates exiting with a Higher Education qualification across the developing Commonwealth. The introduction of Distance Learning scholarships was a radical departure for the Commission when it first began. Whilst it was clear from the outset that distance learning offered the Commission potential to offer more scholarships amongst our portfolio of programmes, it also presented the opportunity to reach students who are not able to take up more conventional international scholarships due to work or family commitments in their home country. From 2015 the Secretariat of the Commission began a comprehensive evaluation study of the programme and evidence has come to light of how successful the programme has become and the difference it has and continues to make to the lives of our scholars and their local communities. From the immediate application of knowledge gained on a Public Health programme engaging in policy discussions within the Ghanaian government, to students using skills learned on a Veterinary Epidemiology and Public Health programme within the agricultural industry in Mauritius. We aim to present a full paper at the next PCF Conference but for 2016 we aim to present key data points and quotes from on-award scholars and their UK Programme leads that demonstrate the importance of the scheme within the developing Commonwealth. Furthermore, we seek to demonstrate how the Commonwealth Scholarship Commission are not only leading the way in funding flexible ways of learning, but are encouraging the continued and immediate application of academic knowledge within local communities; so meeting the challenges outlined in the Sustainable Development Goals head-on.

EMPOWERING GIRLS' THROUGH ODL SYSTEM OF EDUCATION: A CASE STUDY

Verlaxmi Indrakanti & Satyanarayana Rao Indrakanti

Sustainable development is a multidimensional concept based on three pillars- environment, economy and society. Education is capable of generating a wide variety of capabilities; as these three pillars are interrelated and interdependent. Meeting the sustainable development goals requires real investments and innovations in education. Education is a powerful tool to empower women; it improves the quality of life at home, outside, promoting education of their girl children, better guidance to all their children etc. Open and distance learning addresses social and educational inequality and fulfills the needs of disadvantaged group especially the education of girl child, which is an equally essential mandate for the growth of our society. The purpose of the present paper is to find out the opinion of parents towards formal school and ODL. The study was conducted on 50 parents. They were selected randomly from socially and economically deprived categories (Bhopal Madhya-Pradesh, India). For this purpose, Survey through interview has been done to collect the data as most of them were not educated. Before interviewing they were told about the advantages of ODL such as flexibility, feasible fee structure, education at their door step etc., which were

motivating for them. Some questions were framed beforehand based on the formal system of education as they were conversant with it and others on the need and queries of the parents, mostly related to ODL. Interviews of mother and father of adolescent girls were recorded but mothers had more positive attitude for continuing education of their girl child instead of engaging them as domestic helpers. As the study was conducted at the local level, if the same study be conducted on larger sample in other parts of India or third world countries, it can give new dimensions and new approaches for further researches.

ENTREPRENEURSHIP TRAINING OF MICRO-ENTREPRENEURS THROUGH ICTs IN OPEN DISTANCE LEARNING-A STUDY

Victoria Khumalo, D. G. Vilakati & Chandraiah Esampally

Entrepreneurship training in factor driven economies like Swaziland is essential to develop and enhance skills for business start ups and sustainability. The Small, Medium and Micro Enterprise (SMME) sector in Swaziland is predominated by Micro enterprises that constitute about 84% of business ventures. Micro- enterprises are labour intensive, have the propensity to create jobs, curb the escalating rate of unemployment and alleviate poverty level in the country which is currently at 63 per cent. In Swaziland, entrepreneurship is hamstrung by among other issues, inadequate skills to develop and diversify business activities (SMME policy 2009:2). The policy further recommends the design of "tailor made programs for business start-ups, growth and renewal. Business development service providers like the Small Enterprise Development Company offer short term training on business start-ups. The Global Entrepreneurship Monitor suggests that institutions of higher learning should provide intense and quality entrepreneurship training to Entrepreneurs to ensure they have impact to the economy. In this direction, the authors intend to explore whether the Institute of Distance Education University of Swaziland can offer a "Certificate /Training Program in Micro -entrepreneurship" through ICTs in Open Distance Learning (ODL) mode to improve the required functional abilities / skills of Micro-entrepreneurs and devise strategies for enterprise growth. . The paper will inform Educational Planners in designing pedagogy to promote the required skills for Micro-entrepreneurs. Objectives of the study are to:

1. Examine the role of Government in providing support to Micro-enterprises
2. Study literacy status/level of Micro-entrepreneurs.
3. Explore existing training facilities and training requirements of Micro-entrepreneurs.
4. Determine whether the teaching-learning/training through ICTs in ODL mode can be tailored to meet the needs of Micro-entrepreneurs.
5. Suggest training model for Micro-entrepreneurship training through appropriate ICTs in ODL system.

Data will be collected through survey method using structured interview schedule. Respondents will be drawn from selected Micro-entrepreneurs in the country.

ENROLMENT MOTIVATIONS AND INSTITUTIONAL ATTACHMENT OF 30+ AGE BANGLADESHI WOMEN AT DISTANCE LEARNING PROGRAMS

Zobaida Akhter

It has been observed that a good number of women enrolled in Bangladesh Open University are 30+ years old. So, this study has found determinants of 30+ years old women's enrollment. In doing so, a survey questionnaire was employed in this study which included a set of factors that may motivate women to enroll. As this study was partly exploratory and partly explanatory, therefore, factors were driven by several aspects. In fact these aspects were discussed in the past literature such as social recognition, economic, psychological and attribution aspects. However, some factors were discussed under these major aspects which included in gaining Social status, job promotion requirement, more income, connectedness and social presence, social contribution, personality development. Employing principal component analysis we found some valid factors (covering most variances) which later became independent variables used in a regression model and this model was created to investigate its predicting strength to women's intention to continue education programs at BOU. In addition we examined association of location, age, marital status, monthly income with intention to continue education. Moreover, women from urban households were compared with those of rural households on several aspects. Besides, this survey answered whether the early enrollment at education institutions was barred by socio-religious factors. Reliability of the constructs in the scale found high. Interestingly, the result indicated potential implication not only in the field of women's wellbeing and development but also in the scope of life-long learning and educational marketing. Finally how to overcome socio-religious barriers of women's education discussed.



ABSTRACTS

Sub-theme:
**EFFICIENCY AND
EFFECTIVENESS**

OPEN AND DISTANCE LEARNING (ODL): EXPERIENCES FROM BIOLOGY LEARNERS OF THE DISTANCE LEARNING INSTITUTE, UNIVERSITY OF LAGOS

Abosede Margaret Ebabhi and Oluwaseun Amos Olubiyo

This paper examined a survey of the challenges facing Biology learners in Distance Learning Institute, University of Lagos. The study was conducted using qualitative and quantitative approaches. The population of the study comprised all Biology Education learners while a sample size of one hundred learners was obtained using stratified random sampling technique. Data was collected using structured questionnaire. Frequency table, bar charts and percentages were the main descriptive statistics used to analyze and present the findings. The results showed that a large percentage of learners (85%) do not have the technological knowledge and skills for the electronic mode of the program, there are lapses of effective online interaction between the learners and their facilitators. Despite running a distance learning program, seventy-two percent (72%) still want a face-to-face interaction. More than fifty percent The study recommended that the learners' support unit should be empowered to train and retrain learners who are digital immigrant adults on the e-learning mode. There is need for the system to encourage effective interaction and improve on the feedback mechanisms between the learners and their facilitators. This will further increase the interest of the learners in the course of study.

LEARNER SATISFACTION IN A PROFESSIONAL GUIDANCE COUNSELOR PREPARATION PROGRAM THROUGH DISTANCE-CUM FACE-TO-FACE MODE

Anil Kumar Kollolath

Learner satisfaction is one of the key indicators for excellence of any ODL Program. Learner satisfaction depends upon many factors. Some of the factors are: easy access to the programmes; quality of self-instructional materials; quality of student support services provided to the learner; flexibility provided in submission of assignment; continuous assessment and evaluation and also the duration provided for completion of the programme. The present paper provides the feedback and reflections received from the learners who have completed a one year professional counselor preparation programme of the National Council of Educational Research and Training (NCERT), New Delhi at the Regional Institute of Education, Mysore center offered through distance-cum face-to-face mode. The program aims to develop teacher counselors for the secondary and senior secondary schools who are required to perform a dual role in their respective schools. Thus, the learners who were enrolled to the program were mainly in-service government school teachers. The data was collected after the end of nine months of the total duration of 12 months. Structured feedback schedule was prepared and given to the two consecutive batch of learners. The paper summarizes the responses of the learners with respect to their satisfaction with the program and provides suggestions to improve ODL programs.

NINE EVENTS OF MULTIMEDIA LEARNING OBJECTS: A TAXONOMY FOR QUALITY E-LEARNING

Candice Sankarsingh

Taxonomy is used across disciplines as a means of ordering complex environments so as to improve the ability, nature, manner and even quality of our responses to inputs. Based on the hybrid discipline of Instructional Technology, the Multimedia Learning Object Taxonomy has been developed with instructional technologists in mind since these persons must engineer meaningful learning connections to various types of knowledge using media and technology. Seen as an essential classification system, the MLO Taxonomy is used to declare and clarify the relationships between several multimedia learning objects and Gagne's Events of Instruction. Using a story-based format, the poster depicts the applicability of the taxonomy in multimedia design and decision-making. The poster is linked to the main project site for interested parties to interact with the prototypes housed at each event of instruction.

REACHING THE UNREACHED

Chetna Sinha & Vanita Shinde

Girls represent a key demographic for change in the developing world: they are the future foundation of families and controllers of income; and yet the least educated and most underserved. Mann Deshi is reaching the unreached members of this community--a population of girls living in rural India in migrant communities who are illiterate, homeless, and have meagre incomes. Mann Deshi was inspired to support this community by brave girls such as Kamal, who, married at age 13 and denied education, used Mann Deshi job skills training to support her family; and Shobha whose husband left her at age 16 with an infant child and 35,000 rupees in debt, but remained determined to achieve financial independence. Through its Young Women in Entrepreneurship Program, Mann Deshi will transform this marginalized group to become role models like Kamal and Shobha. The Program plans to reach approximately 6,000 girls with a face-to-face meetings, mobile trainings, and community radio. Program delivery on various platforms ensures that any girl can participate, regardless of literacy status or location. Girls' require support on multiple levels as their challenges stem from deep-rooted societal issues to personal self-confidence. Building from fundamental needs to self-efficacy needs, Mann Deshi offers encouragement through a three-step model: 1. Improve general wellbeing through health & hygiene, legal rights, and financial literacy trainings; 2. Increase financial stability by providing access to financial services and job skill training; 3. Create an environment of female empowerment through mentorship and support group meetings. As the program progresses, impact similarly moves from an individual to a societal level. At the individual level, girls see improved nutrition, more hygienic environments, and financial comprehension. As more individuals participate, the community transforms, becoming more supportive of women with empowered decision-making and equal opportunities for both sexes. The poster would like to show how this delivery model leads to efficiency and effectiveness within the context of this subtheme.

TEACHERS TAUGHT, LESSONS LEARNT: EXPERIENCES OF USING VIDEO TO SUPPORT TEACHER LEARNING ON THREE CONTINENTS.

Clare Woodward & Kris Stutchbury

Current models for teacher education are not delivering enough teachers of sufficient quality across the developing world (UNESCO, 2015). In 2005, UNESCO suggested that 'Training models for teachers should be reconsidered in many countries to strengthen the school-based pre-and in-service training rather than rely on lengthy traditional, institutional pre-service training' (p3). Increasingly, modes of open and distance learning, particularly the application of accessible and affordable mobile technologies, are seen as vital to support new approaches in the large-scale provision of teacher training and development. Sustainable Development Goal Four (UNESCO, 2015), with its emphasis on the quality of the education that children receive, means that understanding the potential of mobile technologies to support teaching learning and development, has become an urgent issue. This paper will focus on innovative approaches taken by the Open University UK, to school-based pre- and in-service teacher training, using video, across 3 continents – Africa, Asia and South America. It will use case studies to demonstrate various approaches, surfacing teachers' voices and experiences of new ways of learning. It will share the successes and challenges of using video to support teacher education at scale and describe the impact that the training has had on teachers and their teaching. By examining common features across the examples presented, the paper will draw on models of teacher learning and video use and demonstrate that technology can add value to teacher development activities provided that appropriate support, consistent with the pedagogy that is being promoted, is in place.

DISTANCE AND ONLINE LEARNING SUPPORT SERVICE BENEFITS AND BARRIERS IN UNDERGRADUATE MATHEMATICS LEARNING IN NIGERIA

Comfort Reju & Loyiso Jita

The paper explores the benefits and barriers of support services in learning undergraduate mathematics through the distance and online mode. The aim was to identify support services using accessible and advanced technologies that affect the students' distance and online learning of mathematics at university-level. Samples of students from the University of Lagos Distance Learning Institute (DLI) and the National Open University of Nigeria (NOUN) were selected using purposive sampling method. The research employed mixed-methods approach to understand the way distance and online students' perceived undergraduate mathematics, with regard to support services in the two Open and Distance Learning (ODL) institutions in Nigeria. The analyses of the data included one-sample binomial test and students narratives. Cognitive Theory of Multimedia Learning (CTML), found to be influential in distance and online education, was used as a lens to explain student benefits and barriers of support services in undergraduate mathematics learning. The findings which are consistent between quantitative and qualitative analyses revealed that print materials, the Learning Management System (LMS), online processing of admission, registration, result checking and availability of course materials online all have significant benefits on the students mathematics learning. It is further revealed that apart from uploading the course materials and leaving occasional information on the LMS, many mathematical activities were not available on the platform. The students' desire for audio and visual systems, as advocated in CTML, also did not find its consistency in the

findings of the study, as students strongly disagreed that the utilisation of these technologies in their institutions was prevalent, thus creating barriers to the learning of mathematics in the institutions. The paper recommends that the support services that encourage constructivist-based learning aimed at inspiring, supporting and satisfying students' needs, should be improved for the mathematics students attempting to study in this mode.

LEADERSHIP IN OPEN AND DISTANCE LEARNING AT THE NAMIBIA UNIVERSITY OF SCIENCE AND TECHNOLOGY TO ENSURE COMPETITIVE ADVANTAGE AND OPTIMUM BENEFITS

Delvaline Möwes

Even before independence in 1990, it was recognised that Open and Distance Learning has the potential to address Namibia's educational and training needs in a cost-effective manner. Today Open, Distance and eLearning (ODEL) has the flexibility to accommodate varying levels of enrolment and the capacity to reach out to all corners of the country. It has come to be accepted as a well-recognised mode of education and training relevant to, and necessary for, meeting the emerging demands of the Namibian economy and society. For Namibia, a small country in terms of population, and with limited resources, the Namibia University of Science and Technology (NUST) opted to strengthen its ODEL activities. As a result, areas until now unreached by the conventional education system are being taken care of by the NUST ODEL system. This paper reports on the changed nature of the role of universities in the 21st century. Specifically, the author argues that NUST, while remaining a university of academic excellence and creative thought, was prepared to transform its conventional role of creating and transferring knowledge. NUST, as a very young university, through its Centre for Open and Lifelong Learning (COLL), has become within a short period an institution that seeks to provide knowledge and academic expertise to a much wider community than could be reached through on-campus teaching. NUST can now, through distance learning techniques and open learning philosophies, reach out to the entire community in which it serves, through its footprint across all corners of the country. This required not only new initiatives and approaches to teaching and delivering methods, but also an acceptance that the most sophisticated concepts can be taught in formats that off-campus students can understand. NUST transformed into a truly dual-mode university, recognising the equal importance of ODEL programmes to the more conventional programmes of full-time on-campus studies and research. Through COLL, NUST indicates that ODEL has the ability to provide a collaborative learning environment in a flexible and interactive manner, provided careful design and implementation approaches are adopted to create an enabling environment for effective and efficient performance of staff and students. This paper specifically examines management through a transformational leadership lens to facilitate sound initiatives, designs and implementation strategies at COLL to ensure needed competitiveness and optimum benefits for a 21st century university. The author concludes that COLL's initiatives have clearly proven that there is little doubt that a transformational leadership style, efficient management and administration, instructional design and the provision of sound tutor and learner support can effectively meet the training needs of off-campus students and is at the centre of sustainable development and quality distance education within today's higher education landscape.

EFFECTIVENESS OF AGILE DESIGN IN WRAP-AROUND CONTENT DEVELOPMENT

Denise Gaspard-Richards

ODL is growing at The University of the West Indies and on the premise of increasing access, the demands on the curriculum development unit of the institution's fourth campus - The Open Campus, has increased by more than 300 percent. This paper addresses issues of effectiveness in an agile learning design process which relies on the wrap around content development method. The method assumes efficiencies in the production of a greater volume of course materials that utilize fewer resources. The paper discusses the practical implementation of the agile learning design in seven (7) undergraduate and four (4) graduate programmes over a twelve (12) month development cycle - February 2015 to January 2016, paying attention to the use of templates to focus the content development process; use of OERs to reinvent the learner experiences with the course materials; redesigned orientation and training of course developers; and streamlining and standardization of policies, protocols and processes. With the institutional commitment to increasing access and the high expectations placed on the curriculum development unit for accelerated course development, the paper discusses agile learning design and the successes and challenges experienced in using the wrap around method for achieving scale and sustainability in course design and development. In this setting how can the institution assure sustainability and effectiveness in the production of its online course materials? Does use of an agile learning design lead to development of course materials at the required quality standard? Are the processes sustainable? What are the efficiencies for the institution? The paper also addresses the management of change, responsiveness to change in the agile learning design and will provide an indicative assessment of the effectiveness of the institutional processes. The outcomes are intended to be part of a continuing assessment over the life of a two (2) year course development project.

ASSURING EFFICIENCY AND EFFECTIVENESS IN ODL: EXAMINING STUDENTS' NEEDS THROUGH MASLOW'S HIERARCHY OF NEEDS MODEL - A FRAMEWORK FOR INCREASING STUDENT RETENTION AND SATISFACTION IN OPEN AND DISTANCE LEARNING SYSTEM

Dorothy Ofoha

Dissatisfied learners can hardly persist in their studies. This study examines student needs vis-à-vis Maslow's hierarchy of needs model and considers the pedagogical implications and how we can use the model as a framework in designing and implementing an effective ODL programme. Secondly, it examines the extent ODL provision in developing countries has fared in addressing different levels of student needs within the context of Maslow's model, using the National Open University of Nigeria as a case study. Employing a qualitative descriptive approach, each level in the hierarchy of needs was examined in relation to how far students' needs are being addressed at various levels in course design and delivery. The paper concludes that ODL practitioners need to refocus their strategies, understand students and factor their needs into programme design and delivery; by so doing create a more satisfying learning environment in ways that enhances student success and retention.

INCORPORATING A GAME BASED APPROACH IN THE ORIENTATION PACKAGE OF AN ONLINE COURSE: A CASE STUDY OF UU204

Eroni Racule

Online learning is in its infant stages in the South Pacific region and both the student and teacher have yet to fully comprehend its dynamics, demands and the pedagogies associated with this mode of learning. The Orientation Activity in UU204 was designed (using standard Moodle tools) to alleviate this problem and also address the issues encountered in the previous offerings of the course; it provides students with a preview of what to expect in this online course in an innovative and fun way. The orientation package used a gamification approach (Amazing Race). When a student has finished unpacking it, they would have answered most of their queries about the course and online learning. Students would also have accessed the support structures available within the course and the University, acquired the skills required of an online learner, and had a hands-on experience for the core Moodle tools that would be extensively used in the course. The main objective of the study was to examine whether the orientation had an impact on student online readiness and the attrition rates for the course. The research examined the course offer in two semesters and it involved an average of 770 students per semester.

FIRST YEAR LEARNING EXPERIENCES OF UNIVERSITY UNDERGRADUATES IN THE USE OF OPEN EDUCATIONAL RESOURCES IN ONLINE LEARNING

Folashade Afolabi & A.O. Olajuyigbe

This paper examined the first year University undergraduates' experiences in the use of OER in selected Physics difficult concepts. Mixed research design was adopted using Questionnaire and OER Physics Achievement Test (OPAT) with a reliability coefficients of 0.85 and 0.89 respectively using Cronbach's Alpha for data collection. Data were analysed using diffusion theory of innovation and t-test. A total number of 106 University undergraduates participated in the study. The results showed that OER was able to improve undergraduate's perception, attitude and achievement in and towards learning of difficult concept in Physics and its use in other subjects should be encouraged.

EFFICIENT & EFFECTIVE INCLUSIVE OPEN SCHOOLING AND SKILLS DEVELOPMENT FOR SUSTAINABLE DEVELOPMENT THROUGH INNOVATIVE PUBLIC PRIVATE PARTNERSHIPS

Guilherme Vaz

Sustainable Development can happen only if all young people from all sections of society, particularly the disadvantaged and marginalized, are equipped with Market driven Skills that are integrated with Open Schooling, Employment or Entrepreneurship and Post-placement support for sustainability. This can provide opportunities for youth from minority communities to acquire the education and training that they might have missed out on and improve the employability and earning capacity of youth, particularly that of young women, in these communities. This involves efficient and effective Inclusive Open Schooling and Skills Development by integrating Government Policy & Programs, Individual Programs, Multi-stakeholder Partnerships and Processes through innovation and creative solutions of high

quality teaching and training through ODL using appropriate technology, multi-media content and interactive processes that enable transformative and sustainable change. The Strategy & Approach includes Placement Linkage; Selection of Trainees; Training Centres; Training of Trainers; Training Partners; Training Content; Life Skills; Duration; Certification of trainees; Funding; Implementation & Monitoring. The author draws upon his involvement and experience in conceptualizing, developing, implementing and managing national, large scale change and empowerment initiatives and its integration within the framework of existing policies and environments. He highlights the power of partnership, the need for strategy for replicability, scalability and large-scale change management in making inclusive Open Schooling and Innovative Skills Development a reality. He also examines development of entrepreneurship among minority communities through Community-driven Clusters Approach to Empowering Minority-led micro, small and medium enterprises by enhancing their competitiveness in the context of organizing Self-Help Groups, Centres, providing appropriate skills training, capacity building, technology and support through market and government linkages.

PRODUCING EFFECTIVE TEACHERS USING OPEN AND DISTANT EDUCATION (ODE): A CASE STUDY OF NATIONAL TEACHERS' INSTITUTE (NTI) GRADUATES IN NIGERIA

Hafsat Lawal Kontagora & Garba Dahuwa Azare

The preliminary findings of a study on identifying effective teachers (EDOREN; 2016) showed that a good number of the teachers identified as effective were produced through Open and Distance Education (ODE) also known as Open and Distance Learning (ODL) from National Teachers' Institute (NTI). This study builds on the previous study to investigate and document research evidence of the specific things or aspect of their ODL training that made them effective. The study was qualitative, 20 teachers were selected from 20 primary schools in Kaduna state, Northern Nigeria. In depth interviews were held with all the participants and the findings of the study were analyzed using IPA to examine live experience of participants. The study looked at the curriculum and teaching methodology, capacity of facilitators, other resources/facilities/infrastructure, Types of trainees, Quantity of student, Teaching practice, record keeping and monitoring of students' progress and strategic management. The findings from the study generated evidence of the benefits to be derived from teacher training through ODL.

DEGREE TRACKING SYSTEM (DTS) TO IMPROVE THE EFFICIENCY AND EFFECTIVENESS OF ODL SYSTEM - A case study of AIU

Hatib Shabbir, Kamran Mir & Shakeel Ahmed Khan

Student support services play an important role in providing technical and motivational support to distance learner. ICT based systems have improved the efficiency and effectiveness of support services. In distance education, students being at distant require quick responses from their institution. In the manual system it is practically hard to give prompt response to each and every student, so as a result student has to suffer a lot. The best way to minimize inefficiencies is to use automated systems. This project involves the development of centralized automated software that would not only replace the manual degree issuance system of 1.3 million students studying at AIU but also provide online tracking to all the students applying for Degrees. DTS is also the first step towards the paper less culture which

is adopted by the major organizations of the world. DTS would not only save university cost but also save students cost and time too by conveying all the information/objection through email and SMS. Moreover DTS also monitors the performance of each and every individual working in the exam department AIOU and generates daily, monthly and yearly reports of every individual which helps a lot in continuous performance monitoring of the employees.

THE DEVELOPMENT OF A FRAMEWORK WHICH SUPPORTS THE EVALUATION OF MOBILE EDUCATIONAL APPLICATIONS

Hendrik Johannes Jakob Kruger & Ronel Callaghan

The growth in mobile device usage creates various opportunities for the development of online learning material which could be accessed through various devices. Mobile learning has several benefits some of which include the opportunity for learners to access open educational resources, the benefit of an unrestricting learning location as well as allowing students to progress at their own pace. Educators in South Africa experience challenges to evaluate, select and use applications that will support meaningful learning in their subject field. This paper explored how an Information Systems Success (ISS) model could be utilised by teachers to successfully evaluate, select and use mobile educational applications (MEA). It aims to illustrate how each of the dimensions of an ISS model could be engaged to critically evaluate MEAs and contribute meaningfully in decision-making processes. Qualitative data was collected from three mathematics subject specialists, six teachers who specialise in various subject fields, one technology and technical expert and six further education and training (FET) mathematics classrooms. The data gathered provides novel information on how educators evaluate and select applications and how each dimension of the ISS model could meaningfully contribute to these evaluations. The research concludes that each dimension of the ISS model could be utilized to contribute to the evaluation and selection of mobile educational applications. This provides credibility for the use of the ISS model as a MEA evaluation tool.

BACHELOR OF SOFTWARE ENGINEERING: A CASE STUDY FOR AN EFFECTIVE DEGREE PROGRAMME

H.U.W. Ratnayake & L. S. K. Udugama

How can the application of open, online and flexible education provide employability at the highest professional level? This is made possible with the Bachelor of Software Engineering (BSE) Degree programme offered at The Open University of Sri Lanka applying appropriate technology and innovative approaches meeting the demand in software industry. In this paper, we discuss the effectiveness of the programme according to the graduate employability and employer satisfaction. The degree programme was initiated due to enormous demand from the industry for IT specialists. Accordingly, the main objective of the programme was set as producing quality graduates to meet the software industry requirements. The curriculum was designed considering IEEE/ACM guidelines matching any benchmark. As the industry partnership and collaboration are important in curriculum/syllabi design and providing industry placements, an MOU was signed with Sri Lanka Association of Software and Services Companies. The effectiveness of the degree programme has been qualitatively analysed from the responses of the graduates of the BSE programme. Seven batches of students have been enrolled to date, 53 have graduated and 130 are currently following the programme.

Our survey indicates higher employability of the graduates in the software industry while others work in IT related occupations or are entrepreneurs. Employers are highly satisfied with the graduates. We believe that, the commencement of this degree programme has been a timely venture when open and flexible learning is becoming very popular in the world today. These graduates will contribute actively and constructively towards future challenging endeavours that would have a significant impact in the development of Sri Lanka.

PRONUNCIATION PROBLEMS OF ODL STUDENTS IN THE ESL PROGRAMME AT THE NATIONAL OPEN UNIVERSITY OF NIGERIA; THE DIGITAL TECHNOLOGY SOLUTION

Iyere Theodore

This paper analyzes the incidence of frequently occurring poor English pronunciation among Nigerian English as Second Language (ESL) learners who are undergoing training in the B.A English programme at the National Open University of Nigeria (NOUN). It was discovered in the course of this study that factors leading to these pronunciation problems are interference of the students' mother tongues, their ages, attitudes, and their insufficient knowledge of sounds and the sound system of English. In recent times however, research and detailed studies in linguistics have indicated that Computer Assisted Language Learning (CALL) technologies can come to the rescue. This study therefore, recommends the systematic use of various digital software technologies like the Interactive video disc, Digital audio and the Three Dimensional (3D) Talking Head to effectively develop and improve pronunciation training in spoken English in NOUN.

RUNNING NOUN-MOOC ON MOOKIT PLATFORM: INSIGHT FROM COLLABORATION BETWEEN INSTITUTE OF TECHNOLOGY KANPUR AND NATIONAL OPEN UNIVERSITY OF NIGERIA

Jane-Frances Agbu, Okechukwu Okafor & Opeyemi Dahunsi

As part of its effort to embrace the Massive Open Online Course (MOOCs) initiative and specifically to employ it as tool to improve access and equity in education, the National Open University of Nigeria (NOUN) launched its 1st Massive Open Online Course (MOOC) in June 2016. It is important to note that effective platform is an utmost necessity for an effective delivery of MOOCs. Thus being its first attempt, and quite new to this initiative, NOUN embraced a collaboration with Institute of Technology Kanpur which culminated in the deployment of the MOOKIT platform designed by this institution for its MOOCs. This paper therefore shares experiences of this collaboration, with specific focus on the efficiency and effectiveness of the collaboration to deliver results. For clarity, this paper first provides brief insight on National Open University of Nigeria; definition and dimensions of MOOCs; insight on NOUN's collaboration with IIT Kanpur and this involves the following: initial contact activities, features of the mooKIT platform, navigating the platform and the MOOC approach employed as well as motivation behind NOUN's MOOC on history and philosophy of science. In the last section, the paper presents some learning analytics and feedback on ease and accessibility of the platform. It is hoped that insight from this experience will further strengthen the need for deeper collaboration in this area.

ACHIEVING DESIRABLE LEARNING OUTCOMES IN HIGHER EDUCATION THROUGH OPEN AND DISTANCE LEARNING (ODL): THE FACILITATORS' PERSPECTIVES

Jane Iloanya & Ivy Rose Mathew

Open and Distance Learning is not a new phenomenon in the contemporary higher education system. It is rare to find a country in this day and age without an institution of higher learning offering courses and programmes on distance learning mode. This paper explores the issue of achieving desirable and intended learning outcomes of courses and modules through ODL. A qualitative research approach was used to collect data from Facilitators in two institutions of higher learning in Gaborone, Botswana. Findings from the study indicate that, with proper measures put in place by the Facilitators, that, ODL could be as effective as the Conventional learning mode in achieving desirable and intended learning outcomes of courses and modules in higher education.

BLENDED LEARNING - WHAT MIX? FLEXIBLE LEARNING - HOW SUPPLE?

John Daniel & Stamenka Uvalic-Trumbic

Online technology already permeates higher education - whether programmes are formally offered online or not. We adopt the definitions of the Babson surveys in distinguishing between face-to-face, blended, and online learning. We ask first whether the current fashion for blended learning is a rearguard action against the trend to move much of higher education towards fully online learning, or whether blended learning has special merits. If so, what are those merits? Flexible learning is a term also used to describe various combinations of classroom and online teaching. Is flexibility a purely positive phenomenon or does it have limits? If so, what are those limits? Finally, we hear that higher education is being unbundled. How far can it be unbundled without falling apart and losing the respect of the public on whom it depends?

COMPARING THE COST EFFECTIVENESS OF E-LEARNING AND FACE TO FACE TEACHING AND LEARNING IN OPEN AND DISTANCE LEARNING (ODL) IN NAMIBIA: A CRITICAL INTERJECTION

Josephina Mwachindye Naboth

e-Learning instruction is gaining a growing presence due to the benefits that are associated with the methodology, and its unparalleled ability to consolidate education and training across vast geographical spaces and time constraints. The objective of this paper is to provide the cost effectiveness analysis of e-Learning as a cost efficient platform. The paper also discussed the challenges that are faced by institutions who instruct students via e-learning resources as a response to current academic environment. The paper is a descriptive account of the various cost factors and benefits accrued in using e-learning within the context of Open and Distance learning and draws on a variety of secondary sources both published and unpublished. The paper identified various cost factors as well as the benefits that are accrued in e-learning within the Open and Distance education in conventional educational institutions like the University of Namibia.

HARNESSING THE POWER OF SERVICE QUALITY TO ATTRACT AND RETAIN STUDENTS: AN OUM EXPERIENCE

Kamariah Mohd Noor & Afzhan Khan Mohamad Khalil

The increase in the number of open and distance learning (ODL) providers in Malaysia has provided potential students with bigger opportunities to access tertiary education. However, the challenge faced by the providers is that they have to compete with each other to capture the largest number of students. Getting a good intake is a necessity, retaining the existing students is equally critical as these two factors determine the financial sustainability of the institution. As in any service industry, service quality is key to the success of any higher education including ODL institution. Past studies have proposed that satisfaction is one of the key competitive advantages for a HEI as it will lead to profitability and customer loyalty. In this light, this study examines the relationship between service quality and satisfaction of Open University Malaysia (OUM) students. A performance-based instrument called SERVPERF developed by Cronin and Taylor (1992) was used as a guide for this study, some modifications were made to suit the context of OUM. The instrument consists of two sections, one of which contains 15 demographic questions and the other 65 questions measured on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). Out of 22,000 active students population, 4062 (18.5%) responded and 3290 completed questionnaires were used. Data were analysed using descriptive statistics, correlation and multiple regression. The results indicated that 'programme', 'teaching & learning', 'assurance', 'responsiveness', 'empathy' and 'reliability' explained 77.9% of the variation in student satisfaction. 'Empathy' and 'responsiveness' have the greatest impact on satisfaction in the students' perception of service quality rendered by OUM. The overall satisfaction level measured falls at 77.0% with a mean score of 3.85 on a 5 point Likert scale.

EXAMINING THE SUCCESS FACTORS OF ONLINE STUDENT SUPPORT SYSTEM AT AIOU

Kamran Mir & Amjad Mehmood

Online student support system has an important central role in open and distance learning (ODL) environment where students are geographically away from teachers and institute. Allama Iqbal Open University (AIOU) is the first Distance Education University in South Asia which provides education to around 1.3 million students annually. To provide administrative and educational support to these large numbers of students an online support system is developed using latest ICT programming tools. In this paper, success factors of this online support system are examined using an Information System (IS) success model. The survey was carried out involving non-probability sampling of 173 students. This success model covers the constructs like information quality, system quality, service quality, perceived usefulness, intention to use and user satisfaction. Survey result shows that majority students are satisfied with this online support system in terms of technical standard and functionality but they are less satisfied in terms of information or response provided to them against their raised queries.

STUDENTS' LEARNING OUTCOMES IN ONLINE COURSES: CONTINUAL QUALITY IMPROVEMENT

Latifah Abdol Latif & Thirumeni T. Subramaniam

Much has been written to enumerate the reasons for the success and failures of online learning, and the common view is that the relative success and failure of a student is caused by a combination of three major factors: the student, the environment, and the curriculum. This exploratory research looks into how adult students who are taking fully online courses in an open and distance learning institution evaluate the extent the online learning dimensions influence their achievement of the expected learning outcomes. An online survey was administered to students taking online courses in the May 2015 semester. The online learning dimensions evaluated include: module (clear statement of learning outcome, workload, learning resources and instructional design), feedback, learning experience, assessment, and student self directedness and motivation with student satisfaction as a dependent variable. The average mean obtained for these dimensions is 3.69 out of 5. Relative comparison between the dimensions highlights four areas of concern: workload, instructional design, feedback and learning experience. The student satisfaction level is indicated by a mean of 3.36 (a satisfaction level at 67.2%). The objective was to use the results of this survey as a guide in developing an integrated and robust system linked to the institution's Learning Management System (based on Moodle) for course evaluation. The results will assist the institution in coming up with effective intervention strategies for improving problematic courses so as to increase students' online learning experience and satisfaction. The instrument can also serve as an internal benchmark on the courses offered. The findings highlight OUMH1103 (Learning Skills for Open and Distance Learners) with rating above 4 for all dimensions and a satisfaction rating at 4.13 (82.5%). In general, the results indicate that student satisfaction with online courses is correlated to all the online learning dimensions. Student satisfaction shows strong positive correlation to learning resources, feedback and student motivation. The course evaluation imposed on the students at regular intervals will enable the institution to delve into quality improvement, management of academic performance, curricular and pedagogic review and easy tracking and monitoring of the quality of the courses and programmes.

AN EMPIRICAL STUDY OF THE PLANNING AND IMPLEMENTATION OF COMPETENCYBASED EDUCATION AND TRAINING (CBET) IN NAMIBIA AND ITS IMPLICATIONS FOR OPEN AND DISTANCE LEARNING (ODL): THE CASE OF NAMIBIA TRAINING AUTHORITY (NTA)

Lukas Jacobus Bock

Namibia has in its efforts to strengthen the Technical and Vocational Education and Training (TVET) sector embarked on replacing the current modular system with the Competency Based Education and Training (CBET) model for both traditional and Open and Distance Education (ODL) institutions. A change of this magnitude requires the adherence to a change management process for its effective implementation. This case study using semi-structured interviews studied the effectiveness of the implementation through the perceptions of the governing body of the TVET sector, the Namibia Training Authority (NTA) who implemented the changes. The findings from six managers and Acting CEO of NTA show that due to

the absence of a proper change management plan, the impact of the model could not be effectively ascertained. The findings further emphasise that in order to benefit from CBET as a training model, there is a need for a change management plan to ensure that changes from traditional approaches of training to CBET is effectively implemented.

TRENDS IN THE GOVERNANCE OF ASIAN OPEN UNIVERSITIES: PRELIMINARY FINDINGS

Madhulika Kaushik & Gajaraj Dhanarajan

Like all organisations, good governance is fundamental to responsible and accountable management of universities. There have been studies on governance of universities but almost all address the conventional, face to face institutions. Open universities on account of the semi industrial managerial processes required to efficiently operate the large systems, multiple locations, distributed and very diverse learner populations as well as the requirements of openness and attendant flexibilities, present a very different managerial challenge as compared to conventional universities and may have evolved governance structures/processes/ systems to respond to these challenges. The present study is an attempt to explore the trends that define and exemplify governance in Asian Open universities, through a sample study of select open universities in the region, representing mega and medium sized institutions, in both public and private domains. The study is intended to be an exploratory study, an initial attempt to understand and analyse the existing patterns before in depth analysis into the evolution and rationale for these structures can be initiated in later studies. The study

PROFESSIONAL DEVELOPMENT OF TEACHER EDUCATORS ON ICT INTEGRATION IN EDUCATION FOR ESTABLISHMENT OF COMMUNITY OF PRACTICE FOR SHARING LEARNING RESOURCES AND TEACHING-LEARNING PRACTICE: AN EVALUATION

Manas Ranjan Panigrahi & M. U. Paily

Continuous professional development of teachers and teacher educators are necessary pre conditions for any changes that take effect in the schools. To reach out large number of teachers and teacher educators in a country like India it is not practically possible. Therefore Commonwealth Educational Media Centre for Asia's (CEMCA) decides to harness the potential of technology for this continuous renewal of knowledge and expertise of teacher educators and implement a community of practice where they grow professionally as a community together. Technology should be a tool to help educators meet their continuous professional development need. CEMCA in its three years (2012-14) cycle of programmatic interventions under the sector of teacher education engaged in promoting adoption of blended approach to ICT integration in continuous professional development of teacher educators. In this period, CEMCA organised/ supported several trainings on ICT integrated Teacher Education and contributed towards building of a Community of Practice (CoP) for teacher educators. Within this framework, CEMCA has developed an online CoP platform for Teacher Educators. The programme was for enabling teacher educators to integrate ICTs into their professional development and develop a self-supporting and sustainable CoP. ICT skill training is another component of the activity,

and the assumption is that all those teacher educators trained will use the CoP regularly to help each other in a peer and collaborative learning mode to develop a “culture of sharing” best practices and experiences. After three year, the programme was evaluated using deferent data collection methods. The data for the evaluation was collected from various sources like teacher educators, master trainers, DSCERT, ITFC, principals of DIETS using focus group discussion, personal interview-face to face mode and telephonically, questionnaires, online survey using Google forms and meta-analysis of the existing reports by ITFC and CEMCA. The data collection also involved review of the resources provided, the outputs created, Media-Wiki based online Karnataka Open Educational Resources (KOER), and the Google mailing group's postings. On this effect the evaluation study found significant findings viz.

1. Various aspects of the training programme were appropriate and effective except the duration of the programme;
2. It was for the topics like Kgeography, Marble,wiki, and PhET only about fifty percent felt it very relevant to their work. Amongst all the topics it was for spread sheet, presentation, word processing, mailing groups, e-mail and Ubuntu platform the participants viewed highly relevant since about 80% of them rated this as 6 and above;
3. The training was effective in developing and improving ICT skills and competencies related to all the areas in which the participants were trained;
4. In all the case mailing group postings, mailing group replies and concept maps the contribution was good and it is sustained even now;
5. About 60% of the participants reported that they have either conducted a formal training programme or acted as resource persons in various training programme;
6. Most of them were happy with the topics introduced and requested for additional training on wiki and KOER, Ubuntu, audio, video, and image editing, freemind, kalzium, geogebra, and PhET. There were request to include website development, e-learning, creation of subject videos, pedagogical sessions, mobile learning, other online teaching tools, exposure to assessment tools including rubrics, online forms, content management system, and Kannada language software.

THE QUEST FOR PROFESSIONAL DEVELOPMENT ON TEACHING AND LEARNING TECHNOLOGIES AT CHARLES STURT UNIVERSITY: A CASE STUDY

Md. Shafiqul Alam & Philip Uys

This study provides a reflective overview of the professional development process using self-directed learning (SDL) under the Australian Government funded Endeavour Executive Fellowship program on teaching and learning technologies (TLT) for distance education/online learning (DE/OL) at Charles Sturt University (CSU). The Fellowship focuses on learning and building skills and knowledge through a host work environment in the applicant's field or area of expertise rather than through formal enrolment in a study programme. Professional development is a means of enhancing knowledge, skills, expertise and attitudes, and therefore, human capital theory is used as a lens to reflect on the study. This study employs an Input-Process-Output framework. In this study, learning environment,

resources, factors of Fellow and Supervisor are inputs where all methods used for learning (e.g., mentoring, demonstration, theoretical orientation, visits etc) are considered as process and, cognitive and non-cognitive achievements are output. The authors present a strategic, yet practical approach for professional development of a senior executive from Bangladesh Open University (an ODL university from a developing country) on teaching and learning technologies at CSU (a top-ranked dual mode university in Australia) addressing the emerging issues, challenges, positive avenues for professional development on TLT for OL including key lessons learned. The paper suggests SDL on a TLT project can be considered a good means of professional development of the staff of ODL institutions.

WOMEN' STATUS THROUGH OPEN, DISTANCE AND FLEXIBLE LEARNING IN RURAL BANGLADESH AT INDIVIDUAL AND COMMUNITY LEVEL AS A MEANS OF SUSTAINABLE DEVELOPMENT

Md. Shahariar Alam

Presently women constitute about half of the Bangladesh population, yet their social status particularly in rural areas remains very low. For improving women's status, education especially Open, Distance and Flexible Learning (ODFL) is considered as a significant medium for sustainable development. This paper attempts to analyse the present ODFL scenario in Bangladesh and its impact into rural women's socio-economic details. For doing this two institutions have been chosen. Centre for Mass Education in Science (CMES), a national NGO in Bangladesh, providing skills and general education based on open and flexible learning and Bangladesh Open University (BOU), pioneering open and distance learning institute in Bangladesh. Using the random sampling approach, fifty two female students and fourteen female graduates were selected from both of these organizations. The study revealed that a significant number of respondents were young, married and dropped out from traditional education who found ODFL framework more compatible, flexible and practical oriented sustainable learning method. The study showed that ODFL helped women to overcome socio-economic barriers thereby significantly contributing to their empowerment.

EXPLORING THE POTENTIAL OF OPEN EDUCATIONAL RESOURCES IN THE TEACHING OF ENGLISH AS A SECOND LANGUAGE TO SECONDARY SCHOOL STUDENTS

Michael Nkwenti Ndongfack & Ndahsi Rebecca Tchameni

Over the years, teaching and learning programmes in school systems around the world lay great emphasis on literacy skills. Yet many students in developing countries of Sub Saharan Africa complete primary school without being able to read and write. Most research findings have identified the lack of text books and other didactic materials as one of the major contributing factors. The ubiquitous nature of the internet and the rapid proliferation of various open educational resources (OERs) offer great opportunities for teachers to explore their potential in enhancing students' learning outcomes in English language. This study employs a parallel group experimental research design approach to demonstrate how secondary school language teachers, in the context of scarce educational resources can benefit from the potential of OERs, increasingly available in the internet, to improve students' learning outcomes. The study was conducted with students of form two in the Government

High School Zamengoe, Yaounde in the Centre Region of Cameroon. They were divided into two groups of students comprising $n = 40$ participants each over the 2015-2016 school year that lasted 3 months. The assessment of students' performance in both groups using mean scores and standard deviation demonstrated that, the experimental group did better than the control group. It was therefore recommended that stakeholders in the educational sector consider the use of OERs as an alternative means to enhance students learning outcomes in a context where students have difficulties in purchasing required textbooks.

EFFICIENT AND EFFECTIVE TVET DELIVERY MODEL FOR BANGLADESH

Mohammad Kabir Mia

This will be a poster presentation on efficient and Effective TVET delivery model for Bangladesh through Open and Distance Learning. It is evident that to ensure and promote inclusive and sustainable economic growth, employment and decent work for all (SDG Goal 8) up-to-date skills, knowledge and innovation are very important. Developed countries with higher levels of education and skills, can cope effectively and efficiently to challenges of globalization of business and industry issues. As technology changes abreast new jobs, new job titles and customized work modalities are also emerging. Bangladesh is a densely populated developing country and its adult literacy rate is 59.72.% (2013). This huge population can be our strong source of economic growth if their skills are nurtured and enhanced. In Bangladesh Formal TVET is offered by some 2848 (BANBEIS, 2012) institutions. These institutions are not able to meet the demands of industry, skills mismatch, addressing low level of educated people's skill, working people who need skills enhancement, demand of abroad job, Recognition of Prior Learning (RPL), accommodate apprenticeship. These institutions alone cannot address those problems; alternatively ODL can be very effective and efficient for that. As per National Skills Development Policy 2011, National Technical and Vocational Qualifications Framework (NTVQF) and Competency based Training and Assessment (CBTA) are introduced in Bangladesh which will now ensure to eradicate above issues of skills development in Bangladesh. By this poster presentation, attempts will be taken to explore and identify effective and efficient TVET through Open and Distance Learning delivery model, analyze internal external job dynamics and that will ensure deploying least amount of inputs for getting maximum output with material and non-material inputs, organizational structure, facilitators role in logical way including learners motivation, life skills and lifelong learning development, ensuring employability to enhance economic growth and social equity and equality.

ANALYSING EDUCATION POLICIES FOR THE FUTURE: REALISING THE VISION OF OPEN DISTANCE LEARNING IN 2030

Mpine Makoe

The future of economic development depends on people who are equipped with competencies and skills that are needed for the knowledge economy. To ensure the sustainability of economic growth, higher education institutions are expected to open up opportunities and provide high level of education to a large number of people. Distance and online education based model has proved to be efficient in expanding access into education by providing a cost effective training to both under skilled and unskilled people. The provision of education at this scale is even more critical in African countries where there is a huge need for skilled and trained workforce to enhance economic growth and global

competitiveness. If the problem of capacity for knowledge economy is not addressed, many of African countries may not realise the 2030 Sustainable Development Goal (SDG) 4 – “towards an inclusive and equitable quality education and lifelong learning for all”. To achieve this goal, there is a need for national education policies to provide direction on how this goal can be reached. In this paper the Futures Research Methodology is employed to assist us understand probable development in education and to articulate and work towards the desired outcome. This will be done through analyzing national education policies for Kenya, Rwanda and South Africa in order to identify strategies and actions that may impact on the implementation of policies in line with the 2030 Sustainable Development Goals.

URDU BRAILLE TRANSLATOR & BRAILLE PROFICIENCY TESTING TO INCREASE BRAILLE LITERACY FOR VISUALLY IMPAIRED STUDENTS

Muhammad Zahid Iqbal & Mustafa Naseem

This research was conducted to solve the problem of Urdu Braille translation which is the hurdle for Urdu Braille learning material publication. Braille is the only effective tool for literacy of visually impaired people & there is no tool exists to convert Urdu to Urdu Braille. This paper describes the development of Web-based Urdu Braille translator and Word Processing Braille Font that translates Urdu text to Urdu Braille. We have developed this font to write handle both Grade I & Grade II Braille words. Furthermore, we have introduced Braille proficiency testing system for sighted people, parents and Braille instructors. Using image recognition and reading words, this tool helps for parents and teachers to learn Braille effectively to support visually impaired children well.

UPTAKE OF OPEN DISTANCE AND E-LEARNING (ODEL) PROGRAMMES: A CASE OF KENYATTA UNIVERSITY, KENYA

Mukirae Njihia, Elizabeth Mwaniki, Antony Ileri & Fatuma Chege

Despite most universities in Kenya having embraced Open Distance and e-learning (ODEL) that utilise modern ICT technologies in teaching and learning, enrolment in these programmes still remain low. In Kenyatta University, for example, out of a total student population of about 70,000, only about 5,000 (7%) are enrolled in the ODeL programme. The objective of this study was to establish the challenges faced by ODeL students at Kenyatta University and which impact on the efficiency and effectiveness of the programme thereby limiting its growth. The study employed a sequential mixed methods design that allowed collection of both quantitative and qualitative data. Data was collected from a sample of 207 students through a questionnaire while Key Informant Interviews were conducted with five senior members of staff directly involved in the management of the ODeL programme. The study established that ODeL students faced technical, instructional, institutional and personal challenges which impacted on the efficiency and effectiveness of the programme. Key technical challenges experienced are insufficient exposure to computers and ICT technology, lack of finances to buy ICT gadgets, lack of internet connectivity and content hanging or not opening in the Tablets. Key institutional challenges faced were delayed delivery of study materials, poor administrative services such as registering and paying fees and poor student support services. With regard to instructional challenges, the key ones were inadequate academic support as lecturers failed to facilitate units on-line, lack

of interactivity and poorly designed course material. Lastly, the individual challenges faced were financial constraints, insufficient study time, conflict between study and family/work balance. The study concludes that there is a need to institute learner support mechanisms to address the institutional, instructional and individual challenges faced by learners in the ODeL programme so as to improve on its efficiency and effectiveness.

IS BLENDED LEARNING SUITABLE FOR CONTINUOUS PROFESSIONAL DEVELOPMENT (CDP)? A CASE OF HEALTH MANPOWER DEVELOPMENT CENTER (HMDC), MINISTRY OF HEALTH, UGANDA

Mwogeza Restyakamya

In 2012, the Ministry of Health, Uganda in partnership with Belgium Technical Cooperation (BTC) under the Institutional Capacity Building project (ICB), introduced the eLearning mode of delivery at Health Manpower Development Center (HMDC) an in-service center for continuous Professional Development in the country. This was aimed at increasing access to Training programs with minimal interference of health service delivery. In order to make decisions on adaptability of blended learning mode in training health workers in the rural setting and securing further funding from the BTC, an evaluation was carried out to ascertain the effectiveness and impact of blended learning in the two sub regions of Ruwenzori and West Nile in Uganda. A total of thirty (30) respondents in the two regions were reached through questionnaires and interview guides. The results of the evaluation study indicated beyond reasonable doubt, that blended learning enabled learning/ teaching at HMDC, if attention was paid to the actual pedagogy of the system rather the medium of delivery. Consequently, this study recommended that the Ministry of Health ought to re-focus on the establishment of better equipped resources centers and ICT infrastructure so as to adopt blended learning mode of delivery for training of health workers in the rural setting. The Interactivity levels of instructional materials, learner support and Monitoring and evaluation systems could well be strengthened at HMDC.

CHALLENGES OF DUAL-MODE UNIVERSITIES: A PERSPECTIVE OF INTERNATIONAL ISLAMIC UNIVERSITY ISLAMABAD PAKISTAN

Nabi Bux Jumani, Fouzia Ajmal & Samina Malik

Dual mode distance education universities differ from their single-purpose counterparts as these are not specifically established to offer programs in distance mode and it is added to them afterwards. The fundamental motivation behind distance and dual mode instruction is to give more access to substantial number of students within limited financial budget. Most distance education in Pakistan is delivered by institutions with a mission to offer same degree programs in both on and off campus students. Blended learning is considered as more successful teaching learning strategy as compared to just f2f and distance education. This environment is easily available in dual mode universities. International Islamic University Islamabad has also offered some academic degree programs through Directorate of Distance Education (blended learning approach) in 2015. The present study was undertaken to gather views of administration and teachers working in Directorate of Distance Education. Some of challenges are depicted in the previous studies also. Training and sustaining

part-time personnel in distance and dual mode institutions is difficult due to their other responsibilities (Moore & Kearsley, 2011). As a result of range of study programmes and courses the management team is not able to respond adequately to the diverse needs of distance students (Calvert, 2001). Data were collected through interviews. The data analysis done through thematic approach depicted that the key challenges of offering programs through distance mode included material development, instructional strategies, the difficulties in handling Learning Management system, Examination system, quality assurance and equivalence of degree with face to face degree programs, training of teachers and supporting staff etc.

THE POTENTIAL OF OPEN AND DISTANCE LEARNING IN ENHANCING THE PROVISION OF PSYCHOSOCIAL SUPPORT: A CASE STUDY AT NAMCOL

Ndeshimona Laina Afunde

The Namibian College of Open Learning (NAMCOL) is a state funded educational institution which provides educational opportunities for adults and out-of-school youth. NAMCOL enables those who cannot or do not wish to attend conventional school to study for either the Secondary level or the Tertiary level programmes through Open and Distance Learning (ODL). In 2010, NAMCOL introduced the Certificate in Community Based Work with Children and Youth (CWCY). Since the introduction of CWCY, 250 students have enrolled for the programme and about 50% have completed the programme successfully. This study was aimed at evaluating the effectiveness of the programme delivery through ODL by determining the impact of this certificate on the provision of psychosocial support.

PERFORMANCE EVALUATION OF REAL TIME E-LECTURING SYSTEM AND FACE-TO-FACE CLASSROOM LEARNING EXPERIENCE

Nureni Yekini , Adebari Fasasi & Ibraheem Adedotun Abdul

In this research, we conducted performance evaluation of e-lecturing system via an integrated mobile communication system and face-to-face method of learning towards learning outcome. The sampled population was one-hundred and ninety four (194). A real-time e-Lecturing system was designed and implemented using two groups of learners randomly selected from a class with population of four hundred (400) learners. The first group consist a sample of 97 learners located in a traditional-like classroom face-to-face with the trainer. The other group consisting a sample of 97 learners are scattered outside the tradition classroom but using the e-lecturing system to receive the same lecture at the same time with those in the first group. The two group were the then merged together for the same examination. The groups were interchanged in a second experiment and trained using the same e-lecturing system but a different learning outcome before being examined. Statistics of the result collated shows that 69.7% of the students using the e-lecturing system had above 50% percent, while 62.5% of those in the traditional classroom using the face-to-face method had above 50%. The result of the evaluation shows that students taught with the real-time e-lecture method perform slightly better compared to students taught with face-to-face.

WHEN THE DRUM BEATS: RADIO DRAMA AS A VEHICLE FOR BEHAVIOR CHANGE IN CLIMATE CHANGE ADAPTATION AMONGST RURAL SMALL HOLDER FARMERS

Ojedele Rebecca

The purpose of this project was to test the efficacy of radio drama and related communication interventions in strengthening the capacity of smallholder farmers and herders to adapt to climate change. Male and female smallholder farmers and herdsman in Northern Nigeria are extremely vulnerable to climate change. Various studies showed that indigenous knowledge alone was not enough to reduce vulnerability in rural farm holdings. Appropriate adaptation technologies researched by agricultural institutes and scientists in the country, which could enable farmers to sustainably use resources, safeguard their livelihoods and reduce rural poverty were inaccessible to the mostly illiterate, rural families. This project aimed to disseminate some of the most critical adaptation information through the medium and format identified by audience research as most accessible and popular: radio and drama respectively and then test the methodology. Twenty-six episodes of a multi-component radio variety programme, In KidiyaChanza, were designed centering on an entertaining topical radio drama and incorporating an informative expert corner to discuss the drama and the topic of the day. The program aimed to entertain and educate male and female smallholder farmers in Northern Nigeria, on ways of adapting to the climate change issues affecting them. The evaluation involved surveys of experimental (listening) and control (non-listening) groups of randomly-selected smallholders (n=3000) at the pre and post-programme stages of the project. The surveys which collected quantitative and qualitative data were supplemented with in-depth interviews and focus group discussions involving participatory action research methods. Data analysis from respondents, ages ranging from 16-60 years revealed that the radio drama was able to positively influence the adoption of evidence-based climate change adaptation strategies, particularly when drama was supplemented by support groups such as listeners clubs. This project shows that radio drama has the capacity to overcome long held traditions and practices and stimulate real behaviour change when it is entertaining, of high quality, informative and relevant to their needs. People are willing to take what appear to be big risks, to their livelihoods for example, based on impacts and practices they observe in a radio drama. The project also highlights the still largely under-utilized potential of the mass media in positively influencing behaviour change when it is combined with interpersonal communication through peer support groups such as listeners' clubs and discussion groups.

THE IMPACT OF INFORMATION AND COMMUNICATIONS TECHNOLOGY ON HISTORY LEARNERS' ACADEMIC PERFORMANCE IN SCHOOLS

Olufunmilayo Oloyede & Shabangu Sandile

The focus of this study was to explore the impact of Information and Communications Technology (ICT) on history learners' academic performance in schools. A Pretest-Post test experimental research design was used for this study. The study was guided by three research questions and two null hypotheses tested at 0.05 level of significance. The sample for the study was made up of 50 form 4 history students from two private schools in the HhoHho region of Swaziland. The sample was divided into control and experimental groups. Data was collected using a 12 item essay type test, captioned "Test on Impact of ICT on history students (TIOIHS)". The test was validated by two experts from the University of

Swaziland and has a test - retest reliability value of 0.72. The two groups were pre tested to ascertain level of performance before treatment. The experimental group was taught using ICT while the control group was taught using the lecture method only. The two groups were post-tested to determine the difference in their performance after treatment. The SPSS version 20 software was used to analyze the scores from the two tests. The mean was used to find the difference of ICT on the academic performance of the learners while a t-test was used to find the significance of the difference. The results showed that ICT raised the performance of students in history. Based on these, it was concluded that the use of ICT improved students' academic performance in history. It was, therefore, recommended that the government of Swaziland should enact a policy to enforce the use of ICT in the teaching of all subjects at secondary schools in general and history in particular.

DEVELOPMENT OF OERS THROUGH INTERNATIONAL COLLABORATION E-QUAL CASE STUDY

Parul Gupta

Development of Open Education Resources (OER) is similar to product development and it requires due attention to get the final product. Generally, the focus is laid on the final product and not on the process. However, emphasis is required to integrate process and product development. It is critical to think through a few firsts before jumping straight into product development (developing OERs). For an assured optimum outcome, a few essentials need to be thought through and planned - manpower, content, learning design model, assessment framework, technological infrastructure, functional consistency, sustainability, dissemination strategy, etc. The process and product integration becomes all the more important when the product development is not linked to single institution. This paper deals with the case of E-QUAL project (a European Union funded project implemented in partnership with 4 Indian Universities and 2 Universities from EU, with British Council being the lead partner in the role of project management) where the OERs being developed in different time zones and in geographically spread facilities with an objective to have the final product on a common platform, the daunting task of aligning all the pieces into the final product - a classic case study of product and process integration. This paper would focus on the E-QUAL case study, about the various decision points and the importance of process and product integration. The paper will draw out from the E-QUAL experience and will share the best practices and lessons learnt. It will facilitate in the know-how of OER development and international collaboration with geographically dispersed partners.

REFLECTION ON LEARNER SUPPORT SERVICES AND SCOPE OF WEB BASED SERVICES UNDER DISTANCE EDUCATION: A CASE STUDY

Praveen Kumar Jain, Mohinder Kumar Salooja & G. Mythili

Quality learner support system (LSS) is one of the important components for successful completion of educational programme under open and distance learning (ODL) system. The learners are enrolled across the country and quasi-permanent separation exists between teachers and learners. Traditionally and to a large extent at present also, LSS is provided by establishing the Learner Support Centers (LSC) across the geographical locations. Use of web based technologies is encouraged to supplement the LSS as it provides an important link between the teachers and

students to transfer the knowledge and skills and enhance interaction between teachers and learners and amongst learners themselves. This paper examines the types and extent of learner support services used by learners of a distance education programme along with difficulties encountered by the learners in completion of the programme. Awareness about the web based learner support services and perception on the utility of the web based LSS are included in the paper. The paper presents the opinion of the learners about requisite web based learner support services and their willingness to pay (WTP) for such support system under the ODL system. The study was conducted using an online survey method. The data were collected from the learners of the PG Diploma in Food Safety and Quality Management (PGDFSQM) programme. This programme is being offered by the School of Agriculture, Indira Gandhi National Open University, New Delhi (India). The study revealed that LSS helps in successful completion of the programme under the ODL system. Further, those learners who have used the web based support services were more successful in completing their studies. The web based support system should be designed keeping in view the laptop and smart mobile phone as most of the learners have these devices with them. The expenditure on development of web based LSS could be met by charging additional fees from the learners. The web based LSS, as suggested by the learners, has potential to resolve the constraints in completion of the programme under the open and distance learning.

THE LIFELONG LEARNING OF FARMERS (L3F) THROUGH MOBILE PHONES: PEDAGOGY FOR THE COMMONS

P. Thamizoli & K. Kamarai

Hierarchy and disparity in India are deeply embedded and reflects in the daily life of the people. The result is the lower your position the less you were entitled to own, to participate, to move around etc. Mobile phone undermines these strictures, which is increasingly becoming ubiquitous, plugging a large mass, in to a system of interactive communication. Mobile can be used as an effective learning tool but it depends on the knowledge, skill and the resources of the person using it. Lifelong learning of farmers (L3F) programme started seven years back in Theni district, in the state of Tamil Nadu, India, supported by Commonwealth of Learning (COL) and implemented by a network of Civil society organizations and Farmers producer companies. The programme has been effectively using mobile as a tool to address the women and men farmers learning needs i.e to provide lessons for the better management of the enterprises they set up with the loans received from the commercial banks. It converted everyone as a self directed learner. The L3F learners are small and marginal, illiterate, semiliterate women and men farmers. The paper discusses the processes, outcomes and impact of L3F. The study conducted in 2013 by National Institute of Bank Management, Pune, shows the Benefits/Costs ratio, for each one rupee spent nearly ten times more were returned as benefits. Similarly another study conducted by Business School, New England University, Australia in 2016, reveals the 'profit efficiency' achieved in programme is higher in the case of L3F farmers. The paper will also discuss the future directions of the programme including the possibility to promote L3F as a business model for banks and other stakeholders.

LEARNERS' ACCEPTANCE AND USAGE OF VIRTUAL LEARNING ENVIRONMENT (VLE) PLATFORM AMONG ACCOUNTING STUDENTS OF A PRIVATE UNIVERSITY

Raemah Hashim & Zulaika Zakariah

This study investigates the social influence of Virtual Learning Environment (VLE) platform on the relationship between technical supports and learners' acceptance and usage of VLE among accounting undergraduate student in a private university in Malaysia. VLE is an e-learning platform which supplements the conventional face to face meetings between tutors and students with the aim to enhance learning and making learning less tedious. This study used quantitative research approach with a total of 148 returned questionnaires (21 percent response rate). The result indicates that there is a significant relationship between social influence and learners' acceptance and usage of VLE. Instructors' traits on the other hand was found to fully mediate the relationship between technical supports and learners' acceptance and usage of e-learn. This study implies to the policy makers and academic leaders at the university should pay attention to the quality and effectiveness of the technical supports and also developed instructor competency in managing their e-learn platform as students see both factors significant in assuring their success and attraction towards acceptance and utilization of VLE platform. Future studies should take alternative modes of inquiries such as dyad unit of analysis, using the longitudinal method of data collection design and a nationwide survey covering samples from universities in Malaysia to form generalisation.

INTERACTIVE MATERIALS DEVELOPMENT USING THE RAPID E-LEARNING METHOD - EXAMPLES FROM THE FIELD

Rajput Ravi, Rajabalee Yousrabanoor, Soni Jignesh & Kohealtee Nawfal

In this paper we present the rapid e-learning method that allows educators, practitioners and e-learning professionals to quickly develop curriculum-related interactive learning materials that they can use in classroom environment, in an online learning environment or in other forms of e-learning. This technique does not need advanced ICT skills development and training and shortens considerably the development time of interactive resources if these were to be developed by a core group of developers. This technique has a number of benefits, both at individual practice or at systemic levels. For example, in Mauritius the Sankore project was implemented a few years ago with the support of the French and British government that embarked on equipping primary schools with one interactive whiteboard, such classroom commonly referred to as the Sankore classroom. At the same time, tablets were delivered in secondary schools to students and teachers alike and the tablet PC project is widely described today as a failure, while the Sankore project has been criticized by many educators for issues like faulty whiteboards, lack of technical support, and lack of resources covering the curriculum. The paradox with technology implementation in schools is that the lifespan of technological gadgets is quite short and obsolescence is a major constraint as this requires constant investment resulting very often in unsatisfactory outcomes. The idea we promote in this paper is to decentralize content development process through empowerment of educators to develop and share their own resources as open educational resources. This will result in an exponential increase of the rate of development and release of resources to the schools to ensure maximum use of digital resources, using the existing equipment such as Interactive Whiteboards and Tablets. We provide field examples to illustrate how the technique has been applied in different educational contexts.

TEACHER PERCEPTIONS OF OPEN DISTANCE LEARNING IN SAMOA

Rasela Tufue-Dolgoy, Emma Kruse Vaai & Faguele Suaali'i

This paper examines in service teachers perceptions of the effectiveness of the Open Distance Learning (ODL) as an alternative mode for training and upgrading primary school teachers located in remote areas of Samoa. A survey questionnaire containing closed and open ended questions was distributed to 22 primary school teachers who were enrolled in a pilot ODL Science course as part of their bachelor program. Findings suggest that ODL in its blended mode seems to be an effective method of delivery to address the training needs of teachers residing in remote areas. Although there is an expectation for high instructional interaction in distance learning due to ICT explosion; in the context of the current study the blended mode is more feasible due to internet dilemma. Thus it can be suggested that for distance learning to operate in a more sophisticated manner there is a need for governments to improve their support in this respect.

MOOCS: PEDAGOGIES THAT TRAVEL

Salima Jan

MOOCs (Massive Open Online Course), as an e-learning initiative, is currently gaining at a fast pace. Looking at the success gained by Stanford, Harvard, MIT, Open University UK, India too is taking steps to embrace MOOCs as pedagogy for inclusive growth. But, the question that remains to be seen: is India really ready for such a takeoff. How do our students and what percentages of them respond to online courses? Why is online education still on the periphery of educational system in a land where you have such a huge number of mobiles? How can we capitalize on these pedagogies, which lead towards equalizing educational opportunities? Today as we are moving toward MOOCs it is important to understand that we should not lose our focus on the past failures because it is only through understanding the past records and failures that we can make MOOCs a success story. My paper will chalk out the course of MOOCs, steps taken by to embrace it, its utility and relevance in the present Indian set up. This paper will also present a holistic view about the efforts that were made to use ICT for education but failed to achieve the necessary targets. We know a number of initiatives were launched for dissemination of the knowledge for the marginalized sections but all of them came cropper. What was the reason for this? Was it a lack of planning or the execution was poor? Will MOOCS succeed in a land where mobile users are growing at a rapid pace? My paper will take the past initiatives in consideration, dissect why most of our initiatives fail to fructify, but why MOOCS will be a successful initiative.

A DIAGNOSIS OF LEARNER OPINIONS IN BA (HUMANITIES) PROGRAMME OFFERED BY INSTITUTE OF DISTANCE EDUCATION, UNIVERSITY OF SWAZILAND, SWAZILAND

Satish Rastogi

This Programme Evaluation for BA (Hum) had been based on past learners' opinion about various activities at Input, Process, and Output stage with a purpose to raise quality of every service rendered by the University of Swaziland to new and present students for this programme. The students remain at a distance and hardly meet with academics helping them. This was a Survey

type research using Decision Management Approach based on Learner opinion on various issues drawn after a systemic analysis of various activities at Input, Process and Output stages of BA (Humanities) programme. A comprehensive Questionnaire/Opinionnaire having both closed and open type items covered in 28 pages was sent to about 800 past students, but, only 79 had answered the same and so, became sample for this study. They resisted the rigidity of conventional system rules and advocated for more openness at various stages. The academic counsellors do not follow the Modules, but the Books prescribed for conventional system. They desired separate question papers and examination dates being different than conventional system. They find themselves equally competent in comparison with conventional graduates while at work. They need their programme guide and orientation sessions to cover how to study and write assignments as well as more clarity on some pages of course content. They need options in selecting a question from among many during examination. They expressed some difficulties in understanding the content somewhere mostly in English Courses. The dealing by IDE staff with them was appreciated. They need frequent supplementary examinations to improve their grades quickly if had failed in one or more courses. They could not smell the meaning Openness and On Demand Examination, and so, most of them did not comment on these issues. Recommendations for raising quality may be implemented by the University of Swaziland.

EXAMINING THE EFFICIENCY AND REACH OF OPEN AND DISTANCE EDUCATION FOR SECONDARY EDUCATION IN INDIA: ECONOMETRIC ANALYSIS OF STUDENT DATA FROM NATIONAL INSTITUTE OF OPEN SCHOOL (NIOS)

Shreekanth Mahendiran, Neha Ghatak & Jyotsna Jha

Open and Distance Learning (ODL) for secondary and higher secondary education in India is offered by National Institute of Open Schooling (NIOS) and State Open Schools (SOS) at the national and state level respectively. NIOS and SOS have the same vision of reaching out to the disadvantaged sections and contribute towards expansion of secondary education. In this paper, we deal with the following questions: (a) Who accesses the ODL system to pursue their secondary and higher secondary education; and (b) Does the flexibility offered, in terms of the five year duration allowed to complete the course, result in higher probability of completion? We examine these questions using Learners data from NIOS at All-India level, for the period 2008-2013. The raw student data of NIOS is not in the public domain and therefore has been analyzed for the first time. We use an ordinal logit model to estimate the probability of completion to understand whether the flexibility to complete in five year leads to higher completion rates by using NIOS data in conjunction with data from other national level large surveys such as National Sample Survey Organization (NSSO) and District Information on School Education (DISE). The estimates reveal a decreasing trend in probability of completion, where the highest probability is observed in the first year at about 22 per cent. In addition to total learners, we carry out disaggregated analysis for gender and for social groups, and conclude that the flexibility of five years has only marginal effect on completion rates.

FACILITATING E-LEARNING USING COLLABORATIVE AND SOCIAL METHODS IN THE 21ST CENTURY

Steve Warner & Nabi Bux Jumani

Facilitating learners at all levels of the education stratum to become effective twenty-first century knowledge creators, inventors and innovative workers is increasingly recognized today as a primary objective of education. Presently, the rapid expansion and availability of knowledge indicates the importance of curriculum and instructions that will empower learners to process knowledge using learner centered strategies rather than merely memorizing facts infused by teachers or lecturers. This means that graduates at every phase of the educational system be outfitted with the skills to interpret, analyse or manipulate information, critically think about information, ideas and opinions, and draw conclusions, inferences or generalizations, and communicate their ideas and provide constructive feedback to peers. The twenty-first century has cemented that e-learning is indeed a viable and competitive option for facilitating learning. E-learning via fully online or blended course environments therefore needs to ensure that its learners are equipped with twenty-first century skills and competencies. This paper will demonstrate how a collaborative and social facilitation model, 2T2C, can aid in transforming e-classroom environments and assist in improving learner's creative, inventive and innovative thinking, indicative of pedagogy and technologies to accomplish the dissemination of skills and competencies fitted for the twenty-first century. It also presents a delivery model with ODL training for facilitators which increases efficiency and effectiveness in preparing students for lifelong learning.

AN ANALYSIS OF LEARNING STYLES AND STUDY HABITS OF ACHIEVERS OF OPEN AND DISTANCE LEARNING: A CASE OF IGNOU

Suresh Kumar Pulist

In distance education system, the learners have to manage their learning on their own. Each learner has his/her own 'learning style' which can be defined as "an individual's preferred way of gathering, organizing, and thinking about information". The learners may develop this cognition with the passage of time. Similarly, study habits which "reflect student's usual act of studying and also call forth and serve to direct the learner's cognitive processes during learning", also impact the academic performance of the learners. Therefore, positive performance in academic pursuits by the learners is a function of learning style, study habits and study skills among others. In order to study as to which learning styles and study habits of the distance learners worked best for their achievement, the researcher selected the top performers of the India Gandhi National Open University, India as the sample, who were awarded Gold Medals in its 28th Convocation. The sample was unique in the sense that it was a heterogeneous group of 90 learners who achieved highest rank in their respective programmes. Majority of the Gold Medalists were females (females=51, males=39), though 55 Gold Medalists in all were either unmarried or single (married=35). As many as 34 of the Gold Medalists were employed (unemployed=56). Two Gold Medalists were 'below poverty line' and one achiever was a Jail Inmate. This article has made an attempt to examine the learning styles and study habits of the meritorious learners of the ODL system. Their achievement proved that whatever learning style and study habits they adopted, worked for them. The research question for the study was: whether these achievers followed the same learning style and shared the similar study habits or different learning styles and study habits worked for them? The study has followed a

descriptive approach with survey research design. The Felder and Silverman's Learning Style Model (FSLSM), a popular Learning Style Model among the researchers, has been adopted to study the learning styles of the achievers. A questionnaire was designed and administered on the sample to collect the primary data on learning styles and study habits.

USE OF SOCIAL MEDIA IN FACILITATING HEALTH CARE RESEARCH AMONG NURSING AND ALLIED HEALTH UNDERGRADUATES

Suriyaarachchige Nishan Silva & Zakaria Ismail

Undergraduate Research in Nursing and Allied Health Sciences fields are believed to improve adherence to Evidence based practice by students trained to be future professionals. The young undergraduates are generally reluctant to get engaged in research activities. Their education is based around Information Technology and they use social media heavily for interactions. Therefore a mentoring program was designed to promote conduction, completion and dissemination of undergraduate research among Nursing and Allied Health students in Sri Lanka. Several social media platforms were used; mainly the Facebook, YouTube and Google Hangouts. Knowledge sharing, interaction and collaboration were promoted. Student motivation was also done. Research presentation skills and applying for conferences was also facilitated. Over 90% of the participated 262 students completed a research project and close to 50% presented them both locally and internationally

PARADIGM FOR STUDENTS ADVISORY AND COUNSELING SERVICES IN OPEN AND DISTANCE LEARNING CASE STUDY OF ALLAMA IQBAL OPEN UNIVERSITY

Syed Hassan Raza & Zia ul Husnain Naqvi

The research paper recognizes the vital role of students at educational institute and categorize that the Allama Iqbal Open University (AIOU) is a unique institution in Pakistan because of its philosophy, system, approach, functions and distance learning structure. The study reveals that the university is working to provide educational facilities to the people who cannot leave their homes and jobs in such manner as it may determine. The research take into consideration the distinctiveness of educational pedagogy delivered by Open and Distance learning Philosophy in Pakistan and the facilities rendered to students under this mode of education. It examines the functioning of Students Affairs associated actions at AIOU. The research examines and contends that there is no second opinion that all the academic and supportive departments are playing their role in their orbit but the Directorate of Students Advisory & Counseling Services has a key role in the solutions of student problems and redress of complaints. The complaint Cell evolved at main Campus provides facility to the students getting education and if counter to any academic problems.

TACKLING THE ISSUE OF DROPOUTS IN THE FIELD OF ODL: THE ROLE OF TECHNOLOGY IN IMPROVING STUDENT RETENTION

Trisha Dowerah Baruah

High enrollment in distance education may be counterbalanced by a high rate of attrition. To enhance retention of distant learners there is a need for an extended support system provided by academic counsellors along with technical support in the form of e-learning technologies. Dropout in distance education system means that a student who enrolled in the institute withdraws without completing the course. Very often the learners or the students discontinue their studies due to the poor assistance rendered by the institutes. This problem is experienced in almost all the institutions resulting in huge wastage of expenditure, time and effort on the part of the administration. The dropout problem is currently recognised as a significant educational and social problem as a result of which a thorough study on this vital issue is of paramount importance. Technology plays an important role in aiding student retention and reducing drop outs. Such technologies lead to improved performance of the learners, increased access to the courseware at minimum costs and enabling the learners to develop essential skills by embedding the use of information and communication technologies within the curriculum. This paper aims to find out the impact of technology, especially e-learning technologies on student retention in ODL system. It also tries to make an assessment of the common causes of dropout in the open and distance learning system and provide necessary recommendations in addressing this growing problem.

MOOCS IN THE DIGITAL AGE LEARNING: AN INDIAN PERSPECTIVE

Venkata Subrahmanyam Vampugani & Swathi Kailasam

The recent growth of Massive Open Online Courses (MOOCs) is revolutionizing traditional higher education worldwide. On one hand it reaches to global learners and on the other hand it promotes knowledge to huge enrolments with the help of a digital platform. In India, the pace of MOOCs development and its implementation is slow. There are several factors and constraints hindering the process of its offer. In this paper, the authors will discuss the present status of MOOCs from Global perspective as well as from Indian perspective, reasons for selecting MOOCs by students in India, various MOOCs initiatives in India, Swayam platform, IGNOU experiences and end with highlighting some challenges to offer MOOCs.



ABSTRACTS

Sub-theme:

**QUALITY AND EQUITY
IN LEARNING**

THE INTERACTING ROLE OF OPTIMISM ON VARIOUS DETERMINANTS OF INSTRUCTORS' SATISFACTION: A CASE STUDY OF ELEARNING ENVIRONMENT

Adnan Riaz & Afia Adnan

Quality of education is the key concern of the institutes and universities. Despite efforts of key stakeholders including government, employers and practitioners, educational quality cannot be ensured if teachers are not satisfied and motivated to deliver their best. Specifically considering virtual environment, teachers' role is important because of the different dynamics of online learning. They have to learn new features regularly and teach a number of widely separated students since student-teacher ratio is quite high in developing world. In sum, if instructors are not satisfied, quality of education remains a challenge. This study primarily surveys 54 instructors engaged in teaching different online courses at a local university of Pakistan. System quality, system usefulness and student performance were assumed as key predictors towards instructors satisfaction. Results confirmed the parsimonious nature of the model as well as optimism as moderator on the hypothesized relationships. Discussions and implications are presented based on the findings of the study.

ACTIVATING AND NURTURING THE INVESTMENT OF HEUTAGOGICAL RESOURCES FOR EQUITY AND QUALITY IN SELF-DETERMINED, OPEN, ONLINE AND DISTANCE LEARNING

Bernard Nkuyubwatsi

Expansion of access to higher education is often inhibited by the lack of teachers, limited physical facilities, the shortage of financial resources and limited technological infrastructure. This paper presents and discusses a framework for collaboratively investing these resources for opening up higher education and selected transformative outcomes from a PhD study and other studies on self-determined learning: 1) from secondary education graduation in teacher-training to successful completions of a) undergraduate education in Physics and b) a master's degree program in Applied Mathematics, 2) from a pass grade to a first class and 3) from intention to drop out to a distinction. Strategies to activate and nurture the investment of heutagogical resources in self-determined, open, online and distance learning are discussed. This presentation/paper may benefit educators, institutions and policy makers who are interested in expanding higher education to underprivileged learners through open and distance learning without learning quality degradation.

INSTRUCTIONAL TECHNOLOGY AND THE CASE FOR ENHANCING ACCESS, INCLUSION AND EQUITY

Biswajit Mohapatra

It is being universally emphasized that in order to provide quality education, the instructional technology will be the key to the enhancement of quality in the imparting of education to our next generation in the new millennium. At present there have been recent, rapid, and regulated growth of use of IT in the field of education, to achieve the goal of quality

education. It is being claimed that with increased use of IT, education will become highly interactive, engaging the student every time, much in contrast to present-day passive lecture methods and highly individualized, with world-accessible records of learning facilitated by open distance technology mediated learning systems, such as e learning, MOOCs etc. With computer presentation of education tailored for each student's learning experiences and styles, education will also become highly flexible besides accessible, opening opportunities for the disadvantaged in this country as well as for the millions in developing nations. On the other hand it is being argued that given a choice, students themselves may rightly want a mixed model, by way of both traditional and delivery of education through IT due to the socio economic backwardness of their regions. However it is also being pointed out that implementation of that mixed model, may carry higher ever economic costs, which the poor countries may not be willing to bear. In such cases, the eventual danger, may be the emergence of a two-tier educational system which is bound to have far reaching effects on the increasing access and much needed promise of providing equitable educational opportunities to the poor. Under these circumstances, in my paper I propose to look into the extent to which one can ensure that the technology mediated open distance learning, i.e., the instructional technology, will be able to fulfill the stated goals of both access and inclusion of the poor in the emerging educational order as also will improve quality of education besides contributing towards the fulfillment of the vision of an equitable society.

FACTORS INFLUENCING NURSING LEARNERS IN SELECTING AND ENGAGING OPEN AND DISTANCE LEARNING AS A MODE OF STUDY FOR TERTIARY NURSING EDUCATION

Bitlian Yee, Aishah Ali, Raijah A. Rahim, Aini Ahmad & Mohamad Afzhan Khan

The study aimed to identify factors influencing learners in selecting and engaging in ODL as a mode of study for tertiary nursing education. Face to face data collection with self-administrated questionnaire using convenience sampling with response rate of 208 (64.9%) was used. Regression analysis for significant value for the ANOVA with $p > 0.01$, show that the result for this study is a valid model. The results indicate that environment factors is a significant variable that influence the OUM nursing learners' choice in selecting ODL as a mode of study among nursing learners for their tertiary education. Learners that came into the ODL system views the support of technology as the factor that make them chose ODL.

QUALITY AND EQUITY IN HIGHER EDUCATION IN SRI LANKA: CASE STUDY OF THE OPEN UNIVERSITY OF SRI LANKA

Chandra Gunawardena

In Sri Lanka, in addition to free education, financial assistance is available to undergraduate students through the Mahapola Scholarships Scheme, University Bursaries and Endowed Scholarships to assist those from deprived socio-economic backgrounds to obtain higher education. The change in the admission process to universities in Sri Lanka implemented from 1975 also facilitated the entry of students from rural and under-privileged districts. The establishment of the Open University of Sri Lanka (OUSL) in 1980 provided an alternative pathway for those who had not completed GCE (A.L) and employed persons to obtain

tertiary education. Since 1995 attempts have also been made to increase access by the establishment of new universities and expansion of Distance Education programmes under the Distance Education Modernization Project (DEMP). Three recent initiatives: the IRQUE (Improving Relevance and Quality of University Education) Project, the Higher Education for the Twenty-First Century (HETC) and the QAA (Quality Assurance Agency) under the University Grants Commission attempt to address the need to improve relevance and quality in Sri Lankan higher education. OUSL has been effective in improving access and providing higher education to adults in all parts of the country using distance education through five Faculties: Arts and Humanities, Natural Sciences, Engineering, Education and Health Sciences. The paper will review progress of OUSL in extending access to higher education with specific focus on its status in comparison with other state universities as evaluated by the QAA in order to make recommendations on how OUSL can further improve the quality of higher education offered by it. This paper will analyse the institutional and subject review reports submitted for the state universities by the QAA as well as other relevant documented information of the University Grants Commission.

INSTRUCTIONAL DESIGN OF DISTANCE EDUCATION: GAPS BETWEEN THEORY AND PRACTICES AT ALLAMA IQBAL OPEN UNIVERSITY (PAKISTAN)

Chaudhary Muhammad Ajmal

Instructional Design in Distance Education is an innovative subject in itself. It is key to design course material. It generally refers to planning, development, delivery and evaluation of instructional system. This study is significant from point of view that only standardized self-instructional material is useful for the learner in distance education system. An evaluation of existing instructional design followed by Allama Iqbal Open University can lead to further improvement in instructional material and ultimately the quality of education can be ensured with production of high quality self-instructional material. This study is a source of knowledge for course coordinators, writers, editors, media personnel's, tutors and researchers. The study aimed to evaluate the existing instructional design followed by Allama Iqbal Open University, to identify the gaps between theory and practices and propose strategies for an improved instructional design system for Allama Iqbal Open University. The study was conducted on a sample comprising 75 course writers, 25 course reviewers, 5 course editors, 10 media producers, 150 part time tutors and 1000 students of AIOU. Design of study was cross sectional and survey. Data was collected with a questionnaire on five point likert scale and a focus group discussion. Analysis was made by percentage, mean score, and ANOVA. Study revealed the following gaps: proper need assessment is not being done before conceiving the outlines of courses. Courses do not contain sufficient activities, pictures and illustrations. Blend of media is very weak. Online courses are not operational. E.assessment has not been started. Study recommended that proper need assessment may be conducted before writing any course. Multi-media support may be provided along with correspondence courses. Text material of courses should be enriched with illustrations, pictures, activities and self assessment questions. Online courses should be started. System of E. assessment should be operationalized. Revision of curricula as per need assessment should be arranged.

ACTUALIZATION OF CBET IN TVET EDUCATION AS A PATHWAY TO QUALITY AND EQUITY IN LEARNING IN KENYA

Daniel Kirogo Wahungu

Educationists and scholars have indicated that higher education in Kenya is still largely skewed towards formal employment and to a large extent white color jobs. Evidently, approximately 78 % of learners are undertaking courses in social sciences and humanities against the backdrop of 80 % of the jobs in Kenya being in the informal sector where skills are critical. Thus, this study sought to address the issue of positioning TVET (Technical and Vocational Education and Training) through CBET (Competency Based Education and Training) as the pathway to tackling skills gap in Kenya, improve quality and create a competitive brand. This is in line with the fourth sustainable development goal (SDGs), which seeks to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. One of the targets of this goal is to substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship by 2030. The empirical study entailed a case study using both qualitative and quantitative methods. The target population included administrators, lecturers, students and private sector representatives. Data collection instruments involved questionnaires, interviews, focus group discussions, observation schedule and content analysis. Among the salient findings, the study found out that TVET can play a crucial role in enhancing realization of critical mass of entrepreneurs and innovators needed for the labor market and realization of knowledge based economy. Also the need to increase enrolment and leverage in Science, Technology, Engineering and Mathematic based courses, enhanced comprehensive and consultative qualifications framework and investment and development of human resource capacity. Further, there is need for institutions to lead by example by becoming centers of entrepreneurship incubations to serve as springboards to spur skills through production units and in addition seek increased engagement with the private sector.

THE EFFECT OF COLLABORATIVE LEARNING ON LEARNING STYLES OF ALLIED HEALTH STUDENTS

E. A. K. K. Edirisinghe

To face the dynamic challenges in health care education, it is important to use proven strategies like collaborative learning. Such student centric approaches could affect the individual practices of learning over a period of time. To determine the serial effects of collaborative learning on the learning styles of allied health students. A descriptive longitudinal study was conducted among allied healthcare trainees in Sri Lanka, comprising of students from Nursing, Physiotherapy & Bio-medical. A sample of sixty (60) students's learning styles were assessed by using Gardner's theory of multiple intelligence, with study duration of three years, analyzing their changing of learning styles. This was performed at intervals at the admission, two, eighteen and 36 months respectively of their program duration. A post-survey focused group discussion was held using 3 students from each stream, to evaluate the student's perception on the possible reasons for the results. The learning styles were scored out of 12 for each time slot of 0, 2, 18 and 36 months. Out of the 8 styles, the linguistic (Scores: 10,11,11,11), logical/mathematical (Scores: 10,10,11,11), visual/spatial (Scores: 11,11,11,12) and Body/physical (Scores: 11,10,12,12) styles have

somewhat increased in all the stages compared that of admission stage. The inter-personal style however (Scores: 9, 10, 12, 12) has shown a statistically significant ($P < 0.05$) increase after 18 and 36 months of collaborative learning. However, the level of musical and intra-personal skill has not changed over the time. The main reason was identified as use of collaborative learning methodology from the analysis of the focused group discussion. Collaborative learning promotes interpersonal learning which is an essential component needed for the continuous development of health care professionals.

QUALITY AND EQUITY IN LEARNING: CASE STUDY OF MOMBASA TECHNICAL TRAINING INSTITUTE

Florence Ruth Epeni

Quality and equity of learning is a means of ensuring increased opportunity to skills advancement and competitiveness. Quality education empowers the community to positively participate in development programmes within their community areas. However, most educational systems do not fully address inclusivity, equitability, quality and availability of lifelong learning opportunities. Institutions that offer skills training do not have the full mandate to creating alternative pathway to higher levels of qualification. Majority of people that require skills training are faced with challenges of funding since some are either too poor to afford formal education hence opt for short courses, online and distance learning courses. The main purpose of this study is to determine the systems of learning that will offer knowledge and skills for life-long learning and suggest concerted efforts that stakeholders, policy makers and implementers can employ to create inclusive and accessible quality learning opportunities. The paper intends to use MTTI as a case study where short courses have been developed, implemented and benefitted the community in collaboration with the county government of Mombasa and other entities like Kenya Commercial Bank (KCB). Individual interviews and desk study of various reports and publications were used for data collection. The paper has recommended that courses need to be of quality and giving equal chances to all regardless to age, gender, race or tribe, re-designing of courses in collaboration with all stake holders to ensure affordability, marketability and cost effective curriculum. Life-long learning that can be achieved through Open Distance learning (ODL) to enable many people access education from the comfort of their offices, houses or anywhere at any level.

HOW COMMUNITY ENGAGEMENT AND LOCAL COMMUNITY ORGANISATIONS CONTRIBUTE TO EQUITABLE PARTICIPATION OF OUT-OF-SCHOOL GIRLS AFFECTED BY CEFM?

Frances Ferreira & Mostafa Azad Kamal

Child marriage denies a girl her childhood, disrupts her education, limits her opportunities..." (Government of Canada - UNICEF, 2014). Millions of girls are forced into early marriage for economic and cultural reasons and denied the opportunity to education. If resource-poor families are to invest in the education of their children, boys receive priority. However, if education is both affordable and flexible, girls too can have the opportunity to participate without disrupting their responsibilities in the home and the family. If girls are taught the skills necessary for livelihoods, they can be a major source of supplementing the family income. CEFM is a deep-rooted problem, and it is therefore imperative to mobilize communities with

its deep-rooted cultures, traditions and practices, to demonstrate the benefits of education for girls. Within the context of sustainable development, it is critical to raise awareness among the communities that child marriage has wide ranging negative consequences for development and that allowing girls having education and training can add enormous value to the society as well as their personal and family lives. The study aims at identifying the role of community engagement and local organisations to ensure equitable access of marginalised and out-of-school girls to education and training and will explore: (1) Cross-country variation in the causes, such as CEFM, that leads to girls drop out of school. (2) The role of community engagement to ensure equitable participation and access of the girls to learning; and (3) The role of local organisations to decrease girls' vulnerability to CEFM and improve equitable access to relevant and quality education and learning. The study will be based on data collected from surveys which will be administered on 150 out of school girls, affected by CEFM in both urban and rural areas of - Bangladesh, Pakistan, and India. A structured questionnaire will be used for data collection.

QUALITY AND EQUITY IN LEARNING: A COMPARATIVE STUDY ON STUDENTS PERFORMANCE IN MASAI TECHNICAL TRAINING INSTITUTE

Francis Wambua & Wesley Yegon

Education is facing drastic change, with open, distance and flexible learning taking the centre stage. The increased demand of education among the adult learners and the learners in informal sector is changing the way education is perceived and accessed; and learning in institution is no longer the usual business with the teacher being the sage in the podium, disseminating knowledge. This paper compared the training using open, distance and flexible learning with traditional approaches in order to determine the students' performance. Various case studies were analyzed to ascertain the performance of learners in open, distance and flexible learning and traditional learning approaches; A document review to investigate and compare the performance of students in four classes trained by different lecturers on national examinations is considered at Masai Technical Training Institute; drawing results from the analysis of case studies by various authors, and document review from Masai Technical Training Institute, the study showed that learners who used open, blended learning approach performed better as compared to those who used traditional methods. The research concluded that the training approach in open, distance and blended learning environment enabled learners/facilitators to engage in discussions, collaborations among others and thus improved in the content mastery leading to lifelong learning hence better livelihood. The paper advocates for more research to be done to ascertain its finding.

CAPACITY BUILDING THROUGH ONLINE TRAINING: A CASE STUDY OF AN AUTHORAID COURSE OFFERED BY YABA COLLEGE OF TECHNOLOGY

Funmilayo Doherty, Ravi Murugesan, Ayotunde Salau, John Okewole & Clement Olarewaju

The Yaba College of Technology (YCT) UNEVOC Centre in collaboration with the AuthorAID programme at INASP organized a 5 weeks online course in grant proposal writing (first ever in YCT) and it was hosted on the YCT UNEVOC Moodle site. The online course had 71 registrants

(39% females) from 30 countries: three-fourths were from Nigeria and the remaining participants came from 11 countries in 5 continents. Several registrants were practitioners working in technical vocational education and training (TVET). A call for applications was announced on the UNESCO-UNEVOC email list and through different modes at YCT. To complete the course, the participants were required to pass weekly quizzes and complete a writing activity including peer assessment. Forty-six participants completed the course by meeting these criteria and were given course completion certificates. Participant feedback was positive, and 76% of the respondents felt that online courses can be good alternatives to face-to-face courses as a result of their experience on this particular course. The networking opportunities and knowledge gained has laid the necessary exposure and foundation needed for the establishment of blended method of teaching in YCT. The experience of running this course has developed staff capacity at YCT in grant proposal writing and in running online courses. The main challenges encountered by the course participants during the course were electricity problems, work commitments and Internet connectivity. Despite these challenges, the course participants were motivated to sustain interest because of the flexibility of the course, the relevance of the course content, the activities in the course, the consistent presence of the facilitator, and the interactions on the discussions forum. This partnership between YCT UNEVOC Centre and INASP has shown that international collaborations such as this can not only develop staff skills' but also improve the capability of individuals in institutions from developing countries.

IMPROVING THE QUALITY OF EDUCATION THROUGH THE USE OF GENDER-SENSITIVE STUDENT COUNCILS: EXPERIENCE OF FIVE SELECTED DISTRICTS IN TANZANIA

Godfrey Magoti Mnubi

This study explores the practical aspects of gender-sensitive and democratically elected student councils in terms of strengthening school leadership and governance and providing a platform for increased awareness and advocacy, involving male and female students, in order to address their needs and rights in primary and secondary schools in Tanzania. Purposive and random sampling was employed by the study to obtain 628 female and 614 male participants. Data were obtained from in-depth open-ended individual interviews with purposively selected 26 male and 3 female school heads, 26 female and 9 male mentor teachers, 22 female and 2 male champions and 33 female and 21 male student leaders. Other data were obtained from focus group discussions with 292 female and 289 male student leaders that were randomly selected and a self-report survey of a random sample of 278 female and 257 male students in both primary and secondary schools. Overall, the evidence from the study suggests that the student council plays a major role in strengthening school leadership and governance and increasing the ability of students, particularly girls, to voice their needs and concerns. Some students' concerns were gender-based harassment, the right to quality education and quality health services, the elimination of corporal punishment and teachers' responsibility and accountability. The use of student councils helps to improve the delivery of quality education in schools. For more positive outcomes and in parallel with the student council, teachers' capacity should be improved and that of administrators responsible for implementing the laws, policies and guidelines on corporal punishment and readmission to school of pregnant girls. In the context of similar studies undertaken in various part of the world, this study contributes to having a greater understanding of how students' democratic citizenship can improve the delivery of quality educational services in Tanzania and the rest of the world.

EFFECTIVENESS OF LEARNER SUPPORT SERVICES FOR THE NAMIBIAN COLLEGE OF OPEN LEARNING

Heroldt Vekaama Murangi

This study sought to assess the nature, appropriateness and quality of learner support services offered to NAMCOL learners pursuing the various programmes of the College. The main approach to the study was quantitative, involving collecting of data from learners and staff through a questionnaire. The study also had a qualitative dimension where interviews were conducted with relevant staff at NAMCOL in order to gain deeper insights into some of the information and trends emanating from the questionnaires. In order to allow generalisation of the findings, a representative sample of learners had to be selected across regions and programmes throughout the country. Staff members that were available at the tuition centres which mainly consisted of tutors and heads of centres also responded to the staff questionnaire. Questionnaires were also administered to key staff at NAMCOL regional offices. Thus, a sample of 675 learners and 65 staff was used in the survey. The study revealed that some learner support services are better known by learners than others. Support services learners are most aware of include NAMCOL study guides, comments in tutor-marked assignments, face-to-face tutorials, and telephonic communications with tutors, orientation workshops and tutorial letters. Services learners indicated they are least aware of include NOLNet centres, email facility, internet and the NAMCOL website. It was also evident from the study that there is a very strong positive correlation between learner awareness and usage of services. Despite the fact that NAMCOL learner support services can easily be accessed by learners, not all of them are used by these learners. There are support services that learners are aware of but which they don't necessarily use.

2. TRACER STUDY FOR PROFESSIONAL PROGRAMMES The majority of the respondents were females and most of them were from Khomas followed by Oshana and Omusati. The highest qualification of the respondents before enrolling with NAMCOL was Grade 12 followed by Grade 10. The majority of the respondents were in employment being fulltime or self-employed. Of these, the majority worked as administrative officers and clerks followed by pre-primary and upper primary teachers. The majority worked for the government.

TRACER STUDY FOR THE NAMIBIAN COLLEGE OF OPEN LEARNING'S SECONDARY EDUCATION LEARNERS

Heroldt Vekaama Murangi

The College's core activity has traditionally been its Secondary Education Programme (SEP), which enables those who cannot or do not wish to attend a conventional school to study for either the Junior Secondary Certificate (JSC or Grade 10) or the Namibia Senior Secondary Certificate (NSSC or Grade 12). Learners who register for the SEP receive a full set of self-study materials for each subject. In addition, they are provided with a range of academic supports, including face-to-face sessions with tutors. Those who opt for the Contact Mode of study receive three to five hours of tuition per week in each subject at one of roughly a hundred tutorial centres located at venues around the country. Those who cannot attend these sessions are registered as Non-Contact Learners and can avail of intensive tuition during workshops scheduled twice per year during school vacations. The curricula for the SEP is exactly the same as followed in conventional schools and the self-study materials provided by NAMCOL conform to the syllabi prescribed by the Ministry of Education National

Curriculum Panels for each subject. Learners registered with the College sit exactly the same examinations as their school-based counterparts, which are administered by a unit within the Ministry. Even when the College's learners manage to pass the NSSC examination, there is a widespread belief that they do not fare as well as learners from conventional schools in the competition for places in higher education institutions or for jobs in the formal sector of the economy. The purpose of the study is to:

1. Assess the contribution the College has made to its students in finding employment or gaining entry to tertiary institutions
2. Determine the success of the Professional Programmes, as measured by the perceptions of former students
3. Establish what challenges NAMCOL faces relating to programme delivery and areas for improvements and give feedback to NAMCOL for improvements based on their working experience.

There are three main reasons for learners to enroll with NAMCOL – upgrading symbols (80%), gaining entrance to higher education (47.7%) and obtaining the entry qualification for a job (23.3%).

STRENGTHENING STUDENT SUPPORT SERVICE IN ODL PROGRAMMES IN BANGLADESH: GAPS AND MITIGATION RULES

Iqbal Husain

More than 0.4 million students are studying in Bangladesh Open University now (2016). Most of them are engaged in service or any other occupation. They are really busy and irregular at tutorial class. Students of lower level programme like Secondary School Certificate or Higher Secondary Certificate are not so aware regarding admission and examination process. So there is a lot of scope of doing mistake at any level. Only quality service can save the learners and ensure the quality education also. Actually, Students Support Service is the most important part in Open and Distance Learning (ODL). Study says, there are lots of gaps in quality service in Bangladesh Open University (BOU). The students get poor service during admission, tutorial class, examination and finally getting certificates and transcripts. Some time they become bound to pay additional money to get the proper service. This study has pointed out the type of services, its gaps and causes of the gaps. Finally some points have been recommended as remedies. For the study, data has been collected from the six different regions of Bangladesh in April-May 2015. Total 312 students have been interviewed during data collection. The researcher has followed both the quantitative and qualitative method in the study.

DELIVERY OF OPEN AND DISTANCE LEARNING IN KENYA: DEMAND AND QUALITY CONCERNS

Jackline Nyerere

Kenya has witnessed a rapid expansion in university education with the number of universities increasing by 320% in the last one decade to cater for high demand. The response to this

expansion has been the need for more innovative educational approaches to reach the heterogeneous population with different demands. Kenya has however not taken full advantage of the of Open and Distance Learning (ODL) delivery due to a number of challenges and thus enrolments in ODL have remained low. There are quality concerns that have negatively affected demand for ODL programmes in Kenya as reflected in low enrolments. Institutions are implementing various strategies including improvement of students support services, marketing and awareness creation activities, and reduction of tuition fees. These efforts are yet to bear fruit however as the programmes are still suffering from a credibility and recognition crisis. This paper analyses issues related to standards of ODL programmes in Kenya. It focuses on national and institutional quality assurance policies for ODL programmes, modes of delivery, and perceptions on quality and credibility of ODL in the country. The paper presents data that was collected through desk research, as well as a survey questionnaire with both open and close ended questions. The study respondents were deans/directors of ODL centers/units in universities in Kenya. Common quality concerns cited by respondents regarding provision of ODL in Kenya are inadequate funding, inadequate expertise and lack of necessary ICT infrastructure that is hindering delivery of credible distance courses learning. The study recommends establishment and implementation of quality assurance policies as well as investment in appropriate infrastructure and training of staff to improve recognition and demand of ODL programmes in Kenya.

PUBLIC PRIVATE PARTNERSHIP IN HEALTH CARE DELIVERY - A STORY FROM GHANA

Jeremiah Koomson

Since 2010, HIV prevalence rate among pregnant women in the Central region of Ghana had been above 2% among pregnant women, prevention of mother to child transmission (PMTCT) of HIV service access coverage below 30% ,with 15% of the providers been trained. In order to improve this ugly medical and social picture, a better health delivery process involving the health system, the community and the service providers was evolved by the district health management teams from 2013- 2015. All the 20 health district teams in that region trained every staff providing service at the antenatal clinics and reproductive women in PMTCT service provision. Key community leaders, family heads and faith-based leaders were also educated during the same sessions on the importance of PMTCT for population. Teaching and learning techniques like story-telling, performance evaluation, behavioral assessment, role play, cooperative and collaborative learning, and sharing of ideas were paramount. There was an increasing trend in the uptake of PMTCT service demand and provision for pregnant women during the intervention period. The proportion of antenatal mothers receiving PMTCT provision for 2013, 2014 and 2015 at the local level was 24.7%, 63.3% and 95% respectively. The HIV prevalence rate has consistently been below 2%. The public and private stakeholders are two essential components of the health system, and task shifting as a necessary health care delivery tool can prove to be an efficient initiative in an atmosphere of open and distance learning.

CURATING TO CREATING: AN OPEN PEDAGOGY FOR QUALITY LEARNING

John Okewole & Irene Knokh

Teachers have a couple of things to resolve before taking a class. One of it links the teacher with learners - pedagogy is the connecting factor, the lifeline between a teacher and the body of learners. Pedagogy is the principles and methods of instruction. Most transmission/facilitation of knowledge succeeds and fails on the pedagogical capacity of the teachers. Based on learning theories, several pedagogies have been developed. This paper presents an open pedagogy which is based on the constructivist theory and social learning characteristics of learners. The pedagogy comprises curating, contributing, collaborating and creating/constructing as a systematic way of imparting knowledge for effective learning outcomes. Each of the components of the pedagogy has been used before in different context to administer learning effectively. Review of an art class use of the pedagogy is presented with learners comments after contact with the teacher. The paper gives an overview of how this pedagogy relates with the attributes of open pedagogy. Details of how the pedagogy aligns with the Bloom's taxonomy of learning are also presented.

TRACING THE EDUCATION AND EMPLOYMENT STATUS OF OPEN SCHOOL GRADUATES IN INDIA

Jyotsna Jha, Neha Ghatak & Shreekanth Mahendiran

In India, Open and Distance Learning for secondary and higher secondary level is mainly provided by the National Institute of Open Schooling (NIOS). Based on a research supported by Commonwealth of Learning (COL) the paper summarises the results from a telephonic survey of close to 1000 learners who were enrolled with NIOS and completed secondary and higher secondary education during 2008-2012 in selected states. It emerged that nearly 81 per cent of NIOS certified respondents were gainfully employed. However, a higher proportion of senior secondary graduates were pursuing higher education (38%) as compared to secondary graduates (28%). This implied that two different kinds of learners join NIOS at these two stages; the secondary stage seems to have a bigger representation of lower socio-economic strata. Flexibility offered by the ODL stream was the major reason for enrolling with NIOS with men using this for doing the course while also earning whereas women used this to fulfil their care and domestic responsibilities. NIOS has successfully enabled a good proportion of learners to continue with their higher education. However, the choice of subject was gendered: more men opted more for science and engineering courses, more women opted for humanities. Sixty-five per cent of the respondents who were employed mentioned that NIOS helped them in looking for better jobs, widening the job search, more stable (permanent) and secure (government) jobs. Majority of those in employment were at lower level administrative /support jobs. However, most of the self-employed (63%) did not find NIOS certificates much useful. This implied that it was the certificate and not necessarily the knowledge or skills developed through the course that really mattered. This become apparent even when one examined the way those who were in employment articulated 'certification' as the main contribution of NIOS.

THE NEED FOR MORE ACTIVITIES/ENGAGEMENTS IN SLMS, A CASE-STUDY FOR A COURSE AT IGNOU

Kamalika Banerjee

Most of the times it is observed that the distance educators are very much satisfied with the quality of their SLMs, that is, the self-learning materials. Undoubtedly, the rigorous process through which these are written, edited and rechecked by the members of the course team/ programme team includes a lot of checks and balances. But the distance educator should not be complacent with the SLMs. Instead, he/she should be continuously striving for improving them. The question that one should ponder on is whether the main aim of the SLMs, that is making it learner-centric has been achieved? Was the learner at distance appropriately engaged in multiple activities through the SLMs? Literature search has been done based on these questions and it was found that checklist existed for evaluating learning materials. Also it was found that, many authors tried to consolidate the principles and procedures of SLMs. So a checklist was designed where each unit was to be tested for its introduction, objectives, content, activity and assessment. Certain factors were taken for each of these which were to be checked. Also, it was to be checked if proper illustration was given. This checklist was used to evaluate a course of Inorganic chemistry of B.Sc. program at IGNOU. Since the course was known to me and the learner profile was also known, so I modified the checklist accordingly. The findings of this evaluation reveal that the psychomotor skills of the learners have to be taken care of in a much better way for this course. The author has suggested ways in which these can be taken care of also in this paper.

EDUCATING ONLINE IN SOUTH EAST ASIA

Karen Welsh

Around the world the growing use of new technologies offers both opportunities and challenges to universities and governments focused on preparing graduates for the skills needed by 21st century economies. Online higher education is not as well established in South East Asia as in many other parts of the world, but interest is growing. Governments in the region increasingly recognise the potential it offers, both to enhance the traditional education experience, and to broaden access to education for students in regional area and for time-poor working adults. This presentation will provide an overview of Australian Government work looking at the development of online learning across South East Asia. In particular it will highlight how Australia is encouraging a continued focus on quality, as new models of higher education emerge. In the same way as there are variations in quality in traditional delivery models, there is also a broad quality spectrum in online and blended learning. Supporting the growth of high quality online learning is essential if there is to be increased understanding and acceptance of new delivery modes and broader recognition of qualifications delivered through online education in the region.

A SURVEY OF STUDENTS' PERCEPTION ON QUALITY OF STUDY MATERIALS OF COMMONWEALTH EXECUTIVE MBA PROGRAM AT THE BANGLADESH OPEN UNIVERSITY

Kazi Mohammed Galib Ahsan

Bangladesh Open University (BOU) runs Commonwealth Executive MBA (CEMBA) program under a partnership setting with the Commonwealth of Learning (COL) using the study materials developed internationally by the partner universities. The current study conducts a survey using Likert Scale structured questionnaire to have the learners' perceptions regarding the present quality status of study materials of the CEMBA program of the BOU. The researcher found out the problems relating to study materials and finally made some suggestions which will help the practitioners to avoid any inconsistency relating to the program. This study was conducted on 60 randomly sampled students of CEMBA/CEMPA program of BOU and a questionnaire was used to collect data relating to the perceptions and problems about study materials. Out of 80 distributed questionnaires, 60 were considered valid and therefore were used for this study. After collecting data, the researcher analyzed on the basis of different statistical tools. The findings of this study will guide BOU to better meet student's need and expectations and to develop and improve the study materials up to the mark.

LEARNERS' EXPECTATION AND PERCEPTION ON VIDEO LECTURES: A CASE OF BBS PROGRAM OF BANGLADESH OPEN UNIVERSITY

Kazi Sharmin Pamela, Md. Mizanoor Rahman & Ridita Tasmin

The study examines to identify and understand the attributes of the learners' desired expectations toward video lectures (VLs) and how they experience the VLs bearing in mind those attributes under the Bachelor of Business Studies (BBS) program at Bangladesh Open University (BOU). The study considers the objectives as to identify the expectations and perceptions levels of learners considering variables like engagement towards VLs, learning subject matter, quality of VLs design, supplementary learning resources and assessment. In addition, the study determines the gap between expectation and perception of learners towards VLs. For this study, exploratory and descriptive research methods were used by collecting both qualitative and quantitative data from primary and secondary sources. The primary data was collected through Focused Group Discussion (FGD) among BOU faculty and authority. Moreover, two surveys were conducted based on the same group by using simple random sampling technique with 5 point Likert scale questionnaire from the current learners of BBS program (n=90). The findings of the study states that learners had higher expectations than what they perceived toward VLs. However, learners also perceived higher compared to expectations that they could finish the lesson within the time allocation by using VLs and the VLs could provide information about supplementary materials. Furthermore, the results reveal the gap between expectations and perceptions according to five variables (comprising 28 attributes) of VLs which provided an idea about learners' consequences. As the outcomes of using VLs are not satisfactory what has been expected by BOU authority, the findings of the study may generate the guidelines for using VLs more effectively and efficiently at tutorial sessions.

A CASE STUDY: PERFORMANCE BETWEEN OPEN AND DISTANCE LEARNERS AND TRADITIONAL CLASSROOM-BASED LEARNERS

Loo Sze Wei, Chiam Chooi Chea & Raziana Che Aziz

The recent change in the education platform, relying heavily on the use of internet, has caused a revolution in the education world. The use of technology has allowed many education institutions to reach learners in a mass and provides flexibility to learners in pursuing their tertiary education; they are able to complete their studies via open and distance learning (ODL) mode making learning without boundaries and assessable and open for all. ODL carries the lifelong learning banner for everyone everywhere. However, many concur ODL has less human touch/ face-to-face classroom with the facilitator as compared to traditional classroom-based learning mode. Many institutions become interested in documenting its learning-teaching pedagogy with the performance of learners; whether the learners' academic performance differs in these two different learning settings. This study aims to investigate on the academic performance of part-time learners via ODL and full-time learners via traditional classroom-based settings. Two quantitative courses would be selected for comparison in this study due to its nature of the course, "core" courses status in most programmes and the number of learners taking this course. The results would be able to highlight the need of certain additional workshops for certain learning-setting based to assist learners in their quest to higher education. Other than that, it may also show the future direction of the education industry in Malaysia.

GENDER BASED INEQUALITIES IN LEARNING FOR MITIGATING DISASTER RISK IN BANGLADESH: HOW ODL CAN HELP?

Md. Abdus Sattar

No doubt about that Bangladesh is a disaster prone country. This country is experienced by natural and human induced disasters on an average every year. The severity of these disasters on people is not equal. In most cases, women are mostly affected by natural disasters than the men. Gender based inequalities in every sector make the women vulnerable to disaster because of patriarchal thinking of the policy makers and other stakeholders in disaster risk mitigation. These inequalities are rooted in the unevenness of social, political, economic and educational opportunity. The vulnerability of women to disaster refers to the socio-economic poor condition of women. Social status, economic, cultural and religious constraints allow the women to have comparatively less opportunity for learning, earning, accessing and controlling which adversely affect their confidence and self-preventing initiatives during and after the disaster. The present paper aims at identifying the causes of gender based inequalities in learning for mitigating disaster risk and formulate an ODL model. This paper also explains the status of women's participation in the existing knowledge sharing programs on disaster risk mitigation and unearths the barriers of women. This paper finally presents a strategy for disaster affected women how they can be learned from ODL. This paper includes quantitative and qualitative data. A combination of desktop review and survey method are used in the study. For secondary data, the related journals, books, periodicals and reports are reviewed. For primary data, 20 randomly selected vulnerable women have been interviewed. Some data are collected from the key informants by using KII.

QUALITY OF LEARNING RESOURCES OF COMMONWEALTH EXECUTIVE MASTER OF BUSINESS ADMINISTRATION PROGRAMME: A CASE OF BANGLADESH OPEN UNIVERSITY

Md. Mahfuzur Rahman & Mostafa Azad Kamal

Commonwealth Executive Master of Business Administration (CEMBA) programme is a one of the prestigious programme in Bangladesh for making skilled professionals. For ensuring better learning engagements quality of learning resources plays a crucial role. This paper focuses on the quality of learning resources used in CEMBA Programme as per the learners' perceptions as well as the tutors' opinions. The paper also verifies the effectiveness of the learning resources in engaging the learners meaningfully. The paper finally sheds light on the scope of SDG integration into CEMBA courses.

STRENGTHENING THE QUALITY OF ICT-INTEGRATED HIGHER EDUCATION THROUGH UNIVERSITY-INDUSTRY COLLABORATION (UIC) IN BANGLADESH

Md. Taher

This study aims at developing effective graduates through ICT integrated higher education through UIC for meeting the industry requirements, knowledge economy and competitive job market at home and abroad. Based on stratified and convenient sampling, a total of 52 respondents were selected as a sample for this study. Data were collected through survey method with the help of survey instrument. Every industry required skills (IRS) for graduates measured using 5 point Likert scale ranging from '1' (less important) to '5' (highly important) to rate their levels of importance. The research findings show that the UIC is essential for qualitative changes in the industry in one hand and the university on the other. The research hypothesis developed in this study was supported. This paper highlights on some conclusive strategies for mitigating the skills gap of graduates as perceived by industry people/ employers of Bangladesh. The main implication of the study was that as the low level of ICT integrated higher education through UIC is a prior indication of below average level of graduates' performance, hence industry will need to be more collaborative effort in allowing the learners at university level to have access to industry's information for greater interest of the society. Finally it concludes emerging research issues and pertinent guidelines in the context of Bangladesh.

STUDENTS' VOICES ON FLEXIBLE LEARNING MATERIALS IN A FIXED LEARNING SYSTEM

Mercy Ogunsola-Bande

With the variety of faculty, wide range of expertise and the continuous review process involved in producing flexible distance learning materials- the quality of output should not be debated. But there are other issues that should be considered with these learning materials -which range from access to usability. As regards the latter, it was discovered that four faculty members in the school of education in a conventional university, north of Nigeria are so'

glued' to the use of the flexible learning materials. If student's voices have been a challenge to schools and researchers, then there is need to respond to the voice of these students in education and research (Keeffe & Andrew 2015). The study was conducted between September 2015 and May 2016 and data collection by interviewing some of the students/faculty is still ongoing. The university was selected by purposive and convenience sampling method from a population of 128 universities in Nigeria. One hundred and eight of the students under the tutelage of the faculty interacted with the 20 item validated instrument which were put into five major categories namely: Introduction /objectives, presentation of content, assessment, flow/ use of language and the attractiveness of the curriculum materials. The analysis shows that over 70% of the students agree that the logical presentation of the contents into modules/units and the inbuilt assessment have been very helpful in the flexible learning materials. On the other hand, the most affected category in this study included the introductory aspect and the language. But if it is true that the introduction to any material indicates either 'to read on or take a break', then there is a great need for developers of these flexible curriculum materials to put in greater effort to arouse interest of the learners who are at a distance. Some of the students' voices were also captured on their views with the use of these flexible learning materials in the open statements. Of paramount importance were the feelings expressed on the in-built interactive assessment. Since learning materials make up necessary components in all distance-learning systems, the need for the various sub-sections to be well developed should be emphasized for its sustainability.

EXPLORING PRE- SERVICE SCIENCE TEACHERS' ABILITY IN INTEGRATING ICT DURING INTERNSHIP IN TEACHING PROGRAMME

M. Goswami, R. K. Lima, S. Priyadarshini & S. Gayatri Dora

The professionalism of science teachers demands updating pedagogical content knowledge PCK with information and communication technology (ICT). In this context skill practices and training of pre-service student teachers pertaining to utilisation of e-Resources during internship in teaching programme are highly desirable. The present study is an interpretive qualitative study on pre-service science teachers' ability in implementing technology infused instructional module during the "Internship in teaching programme' in real class room situation. The study reveals few deficiencies of trainee teachers in pedagogy transition and content organisation. As explored the reason for such deficiencies lies in the fact that the trainee teachers passively use the available data without judging its pedagogical suitability for the concept formation. The study also reveals that the self development and curation of e-Resources by the trainee teachers are essential for self efficiency in lesson transaction through ICT.

MASSIVE OPEN ONLINE COURSES: EXCITING WAY OF LEARNING

Nageswaran Narayanasamy

MOOC is a new way of learning platform. It is knowledge for students who want to advance their learning other than classroom. This is the way of learning without any geographical, and language barrier, free to education to all. MOOC course are become more popular and gaining knowledge using information technology. Nowadays, present young researchers and students prefer learning at any time without time restriction. They want freedom to learn and gain knowledge as ultimate goal using MOOC courses. MOOC Courses are very useful for lifelong learners and developing countries.

MULTI-DIMENSIONAL FRAMEWORK NEEDED FOR MOOC QUALITY ASSURANCE

Paul Kawachi

A framework for quality assurance in e-learning generally consists of many dimensions: among the fifty or so frameworks examined to date in this study the number of dimensions has been in the range of four-to-twelve dimensions in each framework. Massive open online courses (MOOC) have dimensions for each of the four terms in the acronym, suggesting the need for around 30 dimensions for assessing and determining quality assurance, eg there are 10 dimensions along which we can measure openness (several with overlap). It has been elsewhere noted that only achieved quality of learning could be the only criteria and dimension required, but given that designers, students and teachers want something deeper in order to improve and achieve better quality learning, then all the various dimensions should be considered within a workable framework for MOOC quality assurance in practice. The 30 dimensions so far authenticated are given here not prescriptively but as suggestions and ideas worthwhile considering by authors as creators of MOOC. They should also prove useful to institutions planning to host MOOC, since they might perhaps raise awareness as to potential pitfalls and challenges - as well as the benefits, and which aspects deserve attention for delivering a high-quality course. This report first gives an overview of definitions, followed by the review of the literature and other sources, then in the results section shows how this multi-dimensional framework can be applied and easily used by teachers in the field. A Strengths Weaknesses Opportunities and Threats (SWOT) analysis is included. Short-term impact studies are in progress to see how effective this framework is in practice.

WHY MOOC

Paul Kawachi & Ugur Demiray

Massive open online courses MOOC are now widely recognised as a new option in distance education with students cooperating together online in some highly structured course hosted and provided by a single higher education institution. Here we present a cooperative co-MOOC with shared delivered by ten institutions in order to reduce the huge cost burden for a single institution, to reduce the online tutor work-load to one-tenth, to achieve gender equity en par with current open university courses, to deliver guaranteed quality and provide credit. The costs for an expert teacher remain high or out-of-reach for developing countries, so reducing this cost to one-tenth brings the overall cost to the institution down to manageable levels. Not only has this but it freed up their tutor to guide their own students in a flipped-classroom approach participating in the co-MOOC. Shared delivery also brings in technical training to and from each other, as well as teacher professional development since each teacher self-improves through reflection-in-action to create better quality learning materials and assessment methods. Our new co-MOOC concept derives from a meta-analysis of existing MOOC and more than 40 frameworks for e-learning quality assurance - resulting in guidelines with 28 dimensions eg the rubric has 8 dimensions along which openness can be measured. The ground level dimensions follow those four established for OER - covering the (T) teaching and learning processes, the (I) information and material content, the (P) presentation product and format, and the (S) system technical and technology : giving us the acronym TIPS. The co-MOOC concept is being applied throughout UDEEEWANA - the association of about fifty countries spanning Eastern Europe, Western Asia and Northern Africa bringing a diversity of students which promotes collaborative group learning, and delivering sustainable low-cost socio-economic development to the local and regional communities.

BENCHMARKING FLEXIBLE SKILLS DEVELOPMENT: A FRAMEWORK FOR SUSTAINABLE DEVELOPMENT

Phiipa Omamhe Idogho & S. G. Eshiotse

Commonwealth of Learning's Flexible Skills Development initiative runs on the core objective of redressing existing inequality of access to formal education and skills which has disqualified a significant proportion of populations from gainful employment, especially in the formal sector of economies. To realize this over-riding objective, FSD relies heavily on Flexible and Blended (FaB) learning methods, which combine orthodox and computer-enabled learning approaches to optimize learning. With inevitable expansion of COL's FSD operations to more institutions/countries in Africa and other parts of the world, it has become imperative to have workable framework that helps TVET institutions create, maintain and sustain standards in quality of skill training they offer. It will not do skill training at informal level much good if individual FSD outlets are left to offer skills training packages that are not peer-referenced. This paper, therefore, proposes a broad framework for benchmarking the theory and practice of flexible skills training in TVET institutions in Africa.

DEVELOPING AND IMPLEMENTING A COMMON QUALITY CRITERIA FOR AUDITING FOR LESOTHO AND MOZAMBIQUE ODL INSTITUTIONS: A CASE FOR IEDA AND LDTC

Phineas Sebopelo

The purpose of this paper is to provide a picture of the efforts by Commonwealth of Learning (COL) initiative to promote quality assurance in distance education amongst sister institutions by sharing best practices. This is to be achieved through institutionalising collaboration as a means through which institutions could further improve their quality initiatives and provide for continual quality within and between institutions. COL through its established structure, Commonwealth Open Schools Association (COMOSA) identified two countries, Mozambique and Lesotho to be a case study in which regional sharing of expertise and knowledge in quality assurance could be shared. In particular the teams developed a set of Quality Audit criteria for IEDA and LDTC; and an action plan for the review and adoption of the Quality Assurance Audit Criteria. The initiative came as a result of the resolution which was taken by all COMOSA Africa members in Dhaka, Bangladesh last year, 2014. The idea is for all COMOSA member institutions to adopt NAMCOL/BOCODOL model of Common Quality Criteria for peer auditing. Botswana College of Distance and Learning (BOCODOL) and Namibia College of Open Learning were identified as consultants to help aid and mentor the two countries to develop the guidelines for quality assurance collaboration and subsequent practical engagement in inter-institutional peer auditing. The two institutions being BOCODOL and NANCOL were chosen because they have a long history of auditing each other using agreed common quality standards. Documents guiding the peer auditing process were drafted for the two assisted countries and ultimately tested. The following were identified as progress and challenges. There was evidence that the two institutions are enthusiastic in having a systematic way of implementing quality. The fact that the two countries developed and signed a document committing them collaborate on peer auditing was a sign that there was interest. The two countries were able to conduct self-audits and present the reports, a clear demonstration that quality monitoring is on course. However, it

was clear that in terms of development in addressing quality matters the two countries were at different levels. For example the quality of reports presented showed that there is need to train members on how to conduct and present audit reports. Communication between the two countries was a serious challenge that hampered the developments between the two countries especially comprehension of Portuguese and English. The initiative is a strong indicator of how regional expertise could be harvested and harmonised the benefit member states. This exercise is a useful trial test to potential and more meaningful collaboration between Countries in the same regional in order to unlock knowledge deposits in a cost effective way. It is envisaged that this initiative could grow beyond regions and be applied transnationally so that all nations of the Commonwealth learn and share knowledge far beyond constraints of economics and geographic locations.

QUALITY AND EQUITY: EMBRACING LEARNING STYLES IN AN ORGANIZATION'S ELEARNING ENVIRONMENT

Phoebus Mere & Richard Naidoo

Just like any other teaching methodology, eLearning consists of different styles of learning and teaching. To create a better understanding, we express our view about eLearning styles in this paper. We believe that paying attention to learners' learning styles may improve the quality of and equity learning. A style in the context of eLearning is the way a person expresses himself or herself characterized by all features differentiating him or her from others. An individual's learning style is mostly influenced by his or her personality, way of thinking, and preferences of pictures, sounds or actions. In this paper we create a case at a telecommunication company, where we use qualitative methods to realize and understand styles of learning in the organization. We follow the activity theory as grounding theory for our study. Open ended questionnaires are used as data collection methods, while thematic content analysis is used as way to analyze data. The contribution is to raise awareness to ComTek about the learning styles in eLearning, to give a picture on the overall learning styles in the organization, and to build a guideline as conceptual model to discover learning styles.

SUSTAINABLE DEVELOPMENT THROUGH ODL: THE EXPERIENCE OF KKHSOU

Prasenjit Das & Ritimoni Bordoloi

Quality Education ensures sustainable living among those who have acquired skills to achieve excellence in performance and deliver the deeds in their day-to-day life. Besides, education has helped us to translate UNO's mission of Sustainable Development Goals into a realisable practice. Therefore, adequate skill-based education is the prerequisite for everyone who wants to lead a dignified life. In the present scenario, apart from the conventional educational institutions, the ODL institutions are growing in the fastest way as a means of accelerating knowledge, skills, competency of the people for bringing the economic viability to the nation. The upward trend of enrolment at IGNOU and Krishna Kanta Handiqui State Open University in the North Eastern part of India has been one of the greatest examples of how inclusiveness can be enabled through the ODL mode. It is mainly because, today's ODL institutions have contributed tremendously to the developmental objectives like providing access and equity, bringing employability, generating a viable economy, ensuring dignity of

life, reducing gender inequality and so on. Besides, the various ways the digital technologies have been used in the ODL mode, has been one of the greatest providers of sustainability to all sections of people in our society by providing them an opportunity of learning in a global environment. In this paper, an attempt has been made to examine how education is related to sustainable development through the ODL mode in the Indian context. It also seeks to understand the level of sustainability among the learners of an open university like KKHSOU through a graduate tracer study which was conducted to assess their learning achievements and outcome as the measures of quality.

ICT CULTURE IN QUALITY EDUCATION: ODL PERSPECTIVE

Sabina Yeasmin

ICT has been a contributing factor in social change and thus leading to development in education. It provides greater access to target learners both on campus as well as the distant learners and has become a vehicle for enriched pedagogical experiences. Education system is still to exploit the full potential of ICT for optimizing human learning. In a developing country like Bangladesh, the question is to bridge the big gap between the 'have' and the 'have not', which has led to the euphoria of introducing ICT in education. ICT and ODL have a symbolic relationship and ICT provide greater access to target learners both on campus as well as the distant learners and has become a vehicle for enriched pedagogical experiences. However, its usage is mainly hampered by low speed, inadequate skills and less awareness of how online technology can improve the productivity, creativity and quality of knowledge work. Today ICT has entered the arena of e-governance starting from ICT literacy and social development. But it has still far from classrooms to create a classroom revolution. It has not percolated to the deeper levels of educational functioning due to various reasons. It is yet to become a culture in the educational sector of Bangladesh. This paper brings into lights the importance of ICT in education, highlights the emerging trends in and various impacts of ICT on primary and secondary education in general and tertiary education in particular, analyzes challenges and opportunities, explore potential future developments and suggests adoption of future strategies so that the nation can prepare its upcoming generations to become global citizens, who can communicate across culture, time and space.

QUALITY AND EFFECTIVENESS OF DISTANCE EDUCATION IN SECONDARY AND HIGHER SECONDARY PROGRAMMES OF BANGLADESH OPEN UNIVERSITY - A LEARNER-BASED EVALUATION

Sadia Sultana, Mostafa Azad Kamal & Ananya Laboni

To materialize Bangladesh's goal for becoming a middle-income country by 2021 requires creation of techno-based large educated workforce. Due to socio-economic drawbacks a big number of students drop out from conventional system of regular education. They could be included in the stream of Open and Distance Learning (ODL) under Bangladesh Open University (BOU), which is the only authorized institution for ODL in Bangladesh. But, BOU education should be free from quality debates as against the conventional system of education. Secondary and Higher Secondary levels being the spring board for both job market and higher education are focused in this research and the improvements as regards quality and effectiveness are sought for through a learner-based evaluation. This has been a

primary research based on questionnaire survey applied among a gender mix of 119 students of secondary and Higher Secondary levels. The methodology adopted both quantitative and qualitative system of analysis. The survey was conducted on the existing system of ODL in BOU. The survey revealed weakness in BOU information dissemination system, its product delivery service and in the TV and radio programmes. The admission procedure, quality of books, management of tutorial classes and the quality of tutoring and the commitment of tutors are found to be of acceptable standard. As a whole, the quality and effectiveness of the Secondary and Higher Secondary programmes are found just satisfactory necessitating improvements. The research identifies a strong necessity of addressing the needs of the learners and a stronger necessity of putting in concerted efforts in meeting and satisfying the diverse nature of the needs of the learners. It suggests a strategy of improvement in keeping with the motto of BOU, i.e. "We assure education at your doorstep"; making of education convenient and flexible for the learners so that no distractions can come in the way of their learning. The suggested steps are creation of a robust and proactive system of delivery of information, development of a strong and sustainable ICT infrastructure, diversification of products to make learning experience more flexible, and finally introducing accountability at all levels to ensure delivery of effective support to the learners.

PRINT- MEDIA EXPERIENCE TO BOOST-UP ODL COURSES ON-LINE AT MUMBAI UNIVERSITY

Sanjay Ratnaparakhi

Institute of Distance and Open Learning, University of Mumbai is on the phase of major changes and quality improvement in the various programmes, its courses and infrastructure. The present system has succeeded with the help of print media and counseling. The researcher has found lacunas and errors in the system and suggested on-line model for implementing distance education effectively. The University of Mumbai has dual mode model and accommodates distance and conventional learners. So he thinks a type of research is required in respect of conventional system and combines the quality of both modes. The combined model will become unique experiment in higher education of India.

QUALITY CONTROL MEASURES AT INSTITUTE OF DISTANCE EDUCATION, UNIVERSITY OF SWAZILAND, SWAZILAND

Satish Rastogi

Swaziland people have an opportunity to join any one of eight (8) Programmes offered by University of Swaziland through its Institute of Distance Education. There is a debate in Swaziland regarding product quality between Graduates of conventional mode and of distance education mode. In fact, the term quality is an adjective and not a noun, as it defines status of some object, incident, action, and activity, in comparison with other one. It may be a matter of bridging the gap between 'Perception' and 'Expectation' for various activities observed after systemic analysis of a Programme. The quality of output (Graduates) depends upon the process which again depends upon input being a combination of 5 M. These are Man, Machine, Money, Material and Method. A capacity building for strengthening these factors at Institute of Distance Education must be organised by the University of Swaziland. Full time and part time man power needs staff development in Tutoring, Research and

Extension activities. The Process stage in Distance education system differs from Conventional system because the word of mouth is word of hand. Students need sample assignment, sample project report and a sample Question paper based on Bloom's Taxonomy. The Orientation material given to students must cover all these activities. Distance Education mode may be used for staff development among full time and part time academics by providing Literature already developed by IDE entitled " Academic Counselling - A Human Support" and "Educational Technology for Effective Teaching" followed by personal contact sessions on Holidays. Programme Evaluation may help to justify the product quality. It may enlighten about material potential for generating motivation, sustaining Interest in study, and in altering an inferiority complex among distance learners, if any. Necessary financial requirements (Budget) be prepared and submitted to University of Swaziland authorities for funds allocation. The Programme Coordinators in IDE must organise a monthly meeting with concerned teachers to smell their academic and administrative problems and suggest for an amicable solution. Use of Email, Cell Phone, Fax, Landline phone would be beneficial for them. Contact & discussion with past IDE students for same programme on various academic and non-academic issues may also be initiated in such meetings.

LEARNERS AND TUTORS PERCEPTIONS REGARDING THE QUALITY OF THE STUDY MATERIALS AND SUPPORT SERVICES: FORMULATE A QA FRAMEWORK FOR BOU

Sharker Md. Numan

Quality Assurance (QA) is essential for improving organizational efficiency and effectiveness which increase public accountability. QA criterion must be clear and transparent; it should be achievable and must meet stakeholder's expectations. This study tried to explore the quality of the study materials, programs and quantify the support services of Bangladesh Open University (BOU), which leads to formulate a QA framework for BOU. A Cross-sectional study was designed to collect data from October to December 2015 using a semi-structured separate set of questionnaire for learners and tutors. Sample frame of this study were learners and tutors. Study centers were selected randomly along with its learners and tutors, and sample size was 615. The questionnaire was designed using the 13 (thirteen) criterion which have been identified in Quality Assurance Toolkit for Open Schooling by Commonwealth of Learning. A pilot test was conducted to confirm the clarity of the items. There were 434 learners and 95 tutors responded in the study. Around half of the learners (48.4%) and tutors (52.6%) expressed that the quality of module was easy to understand, whereas one-fourth of the learners were not interested to go through the module independently. Moreover, 50% learners and tutors thought that knowledge gained from the program might be applicable and useful for the next level of education. About half (52.8%) of the learners did not received any support services regarding tutorial and practical sessions from deferent offices. Whereas, 50% tutors did not get satisfactory level of cooperation from the Regional and Sub-regional Offices. Enthought, examination and published of result was not held timely. Quality media program need to be broadcasted in desired time and the university should adapt ICT based teaching-learning approaches. This study identified some significant QA criteria at BOU, which leads to formulate a QA framework for BOU context. Results of this study may provide valuable baseline information for the policy-makers to develop a standard QA framework for BOU.

ADVOCACY, SESITIZATION AND DEVELOPMENT OF AN OER POLICY FOR PROVINCIAL EDUCATION MINISTRIES IN SRI LANKA

Shironica P. Karunanayaka & Ishan Sudeera Abeywardena

With the objective of providing direction in the use of Open Educational Resources (OER) to increase access to and support quality teaching and learning in the school education system in Sri Lanka, an advocacy program was conducted leading to the development of draft OER policies for the Provincial Ministries of Education, representing the nine provinces of the country. This paper discusses the procedures, challenges and outcomes of this process. The process included preparation of a draft OER policy framework; build awareness among key stakeholders on the concept of OER; advocate the benefits of an OER policy for education; initiate the process of drafting OER policies and working towards a final draft policy. While scheduling the meetings at the nine Provincial Departments of Education was very challenging due to their very busy official involvements and unanticipated issues such as natural disasters, the outcome of the activities was quite optimistic. This initiative was very positively accepted by all stakeholders in the nine provinces, realizing the significance of developing a government policy on integrating OER in the school education system in Sri Lanka, in order to help making teachers, learners and the greater community more sensitized about and encouraged to make productive use of openly licensed educational materials. The draft policy framework prepared was accepted by all, indicating their specific feedback catering to provincial requirements. Especially, promoting teachers not only to reuse existing OER, but also to create and share supplementary educational materials as OER in the two national languages (Sinhala and Tamil) matching with the national school curriculum requirements was identified as a crucial need. For this, the need for raising awareness, building capacity, developing positive attitudes, preparing guidelines for OER adoption at school level, and establishing OER repositories containing materials created by teachers and learners were suggested. Further, the importance of utilizing the already established ICT-enabling environments at school, zonal and provincial levels, as well as introducing emerging technologies and upgrading of facilities to support access to and redistribution of OER, with proper monitoring and evaluation mechanisms were emphasized. It is envisaged that the development of Provincial OER Policies leading to a National OER Policy would effectively address the needs of the Sri Lankan education system to meet new challenges in moving towards a knowledge society.

ENHANCING QUALITY IN ONLINE TECHNICAL TEACAHER EDUCATION IN SRI LANKA

Shironica P. Karunanayaka

Addressing the professional development requirements of the teachers in technical and vocational education institutions in Sri Lanka, the University of Vocational Technology (UNIVOTEC) offers a National Diploma in Technical Teacher Education (NDTTE) course. A project was implemented with the support from Commonwealth of Learning (COL) to integrate online teaching and learning in the NDTTE course, with the intention to further enhance its quality by supporting a flexible teaching-learning process and extended access to learning resources. This paper reports a case study on the capacity building of faculty in online course design and development in relation to the NDTTE course. During a series of intensive workshops, 24 participants in six teams actively engaged in developing their

competencies in designing learning experiences in accordance with the constructivist pedagogy, integration of Open Educational Resources and effective online facilitation, resulting in six interactive online modules in the Moodle learning management system. Participants' feedback obtained via questionnaire surveys, reflective notes and focus group discussions revealed significant enhancements in their individual capability and confidence in creating quality online course materials. It was evident that participants' ability to design and develop interactive online learning environments using various asynchronous and synchronous communication strategies has been vastly improved. The "COL e-Learning Training Needs Checklist" that was used as pre and post-survey also revealed a significant increase in their proficiency in online course design, development and facilitation. Despite various challenges due to participants' heavy workload and other commitments they were able to achieve the expected targets to a great extent. Overall, the capacity building process has been a very productive exercise, during which the online course materials of the NDTTE course by UNIVOTEC were successfully created by the staff in a quality manner.

OERS: ISSUES AND CHALLENGES OF COPYRIGHTS, LICENSING AND ACCESS

Siva Prasad Rambhatla & Prabhakar Rao Jandhyala

Quality assurance represents an important aspect of OERs development, both in content development and issues related to online conversion, such as copyrights, licensing and access. Most of the time when developing OERs many a time little attention is paid to copyright and licensing aspects which can affect access to the learners. Hence, the present paper deals with different dimensions of licensing and copyright issues in the development of OERs. It also focuses on the steps to be taken in order to avoid the pitfalls in OER development. This paper answers the above questions in light of the study undertaken by the University of Hyderabad team in E-QUAL project. While working with multi-disciplinary ENRs modules, it was observed that a multiple interdisciplinary methodological approaches are required to assimilate themes relating to different areas of knowledge relating to sciences, social sciences and humanities. Different pedagogical strategies are to be adopted keeping in view the diverse backgrounds of the learners. The purpose is to enable the learners to get an exposure to the basic concepts and perspectives across disciplines related to the topical areas. This will empower the learners to choose ones areas of interest for future learning in a holistic perspective. In view of the above, the challenges of licensing and copyrights in OER development become all the more necessary to be critically analysed. This will not only ensure quality in OERs development but also facilitates their access. It acquires special significance in multilingual, multicultural, multi-ethnic and diverse socioeconomic contexts. It poses challenges in content development and its online conversion in order to ensure, besides quality, equity in learning. One can ensure sustainability of access and equity only if one ensures the sustainability of the process.

QUALITY ASSURANCE IN ONLINE DISTANCE LEARNING (ODL): CHALLENGES FOR USP

Sofina Nisha, Anjeela Jokhan, Sujlesh Sharma & David Rohindra

Distance learning is probably the oldest mode of teaching particularly for students disadvantaged by their geographical remoteness from the university campuses. The purpose of this paper is to provide an insight of the challenges posed by Online Distance Learning (ODL) and examine the implications of these challenges for accreditation as currently faced by The University of the South Pacific (USP). Course Coordinators of selected online courses were interviewed and case studies were carried out on a number of online courses to identify perceived challenges based on their online teaching experiences. It further looks into the strategies that USP is adopting to mitigate the challenges. USP which is a premier institution of higher learning for the Pacific region also offers distance and flexible learning in a variety of modes throughout USP's 14 campuses. In its strategic plan (2013-2018), USP aims to increase the number of programmes by online mode as well as obtain international accreditation for its programmes and the institution. The quality standards set by accrediting agencies for online courses are no different from those applied to traditional face-to-face courses. They require institutions to demonstrate the extent to which they fulfill the accreditor's standards particularly showing processes that validate that the learning experience for students in the different modes is the same. This creates a number of challenges for USP for its online mode primarily in ensuring the authenticity and integrity of student work, creating appropriate learning activities, assessing practical skills of learners, huge investment requirements to upgrade infrastructure and resources, etc. While technology has narrowed the gap between the two modes of learning, it is still differentiated in terms of the amount of time and space the students share with their peers and instructors.

ADAPTING QUALITY ASSURANCE TO INNOVATIVE PROGRAMMES

Stamenka Uvalic-Trumbic & John Daniel

Institutions are being urged to innovate in the provision of higher education, notably through online delivery, while some governments are encouraging the emergence of new providers. Quality assurance systems have been slow to catch up, so this burst of innovation is being restrained by having to satisfy QA criteria designed for an earlier era. QA agencies are not entirely to blame for this delay. Many innovations - OER and Open Badges are two examples - are initially greeted with scepticism and take several years before they enter the mainstream. We examine this challenge of quality assurance for innovative programmes from three angles. First, the US Council for Higher Education Accreditation, through its International Quality Group (CHEA/CIQG), has designed and pilot tested a 'Quality Platform'. This was expressly conceived for innovative higher education provision - variously described as 'non-institutional' or 'post-traditional'. Quality higher education is quality higher education in whatever form it takes, but designing a QA system for innovative provision means focussing on the most essential criteria. For the Quality Platform these centre on the articulation and achievement of student learning outcomes. We describe the pilot implementation of the Quality Platform at the DeTao Masters Academy in China, an organisation conducting high-level training outside China's conventional higher education system. Open Badges are an innovation in certification that is only now entering the mainstream as digital badges are adopted by organisations outside North America and the choice of supporting software diversifies. Digital badges are increasingly used for MOOCs and OER to help learners get

credits that can lead them to degrees. We suggest questions that users should ask themselves before accepting badges as certification. Finally, we note two guides, written in the form of Frequently Asked Questions, which remain useful tools for judging the quality of innovative programmes. One, *A Guide to Quality in Online Learning*, focuses on online technology in regular credit programmes. The other, *A Guide to Quality in Post-Traditional Online Higher Education*, addresses the challenge of QA for more informal approaches such as MOOCs and OERs, both of which are now mainstream features in higher education.

INCLUSION THROUGH HUMANE, QUALITY, AND MOBILE TECHNOLOGY

Surajit Mahalanobis

'Access' and 'Inclusion' are two aspects in education avidly discussed in India, ever since the Kothari Commission (1964-66) started to address national education policy in India. The concept had matured from 'Correspondence Course' to 'Distance Education' when Andhra University started its novel programmes in 1982. Soon after, from 1985, with the inception of Indira Gandhi National Open University (IGNOU), the Open and Distance Learning (ODL) as an academic policy received massive shot in the arm to emerge as a saviour of the masses to fulfil their ambitions at careers. Over the years since then, it achieved what probably no university in the world delivering both general and vocational education, (even the Open University of the UK, incepted in 1969), has yet to achieve. Today IGNOU has gainfully educated over four million students already, majority of whom are also well placed in employments. The retention was admirably high till recently (2001-2011). Indeed, Indian ODL's success story mostly emerged through a teaching-learning process based on pedagogic-and-thus-retention method. Focus has been more and more on the conventional education delivery system, by creating high Quality Study Material. With changing times, and emergence of the Information and Communication Technologies as the prime leveller, the new generation of students find it difficult to get their intellectual receptivity with their techno-savviness, a factor easier adopted by them than the students of the earlier generation. Today's Learners are techno-savvy, want to grasp everything quickly, better if provided with encryptive pedagogic fervours. As with the change of time, technology having become more attractive to the students community, the delivery of education through technology naturally has emerged to be the drawing factor for Inclusion of students in the ODL. This paper discusses the two methods (pedagogic and technology-driven delivery of education and counselling), while evaluating opportunities at grassroots application of the ICTs for better results. Behind both techniques, there is an element of humane touch of love and care that plays catalyst to Inclusion, but largely bypassed under the rigours of delivery. Without ensuring humane touch at grassroots level, this paper stresses, the technologies cannot be a successful motivator for Inclusion. For that progressive investment by the Distance Education bodies would be required.

ASSESSMENT ON THE QUALITY OF SELF-LEARNING MATERIALS OF BBS PROGRAMME AT BANGLADESH OPEN UNIVERSITY: REFLECTIONS FROM THE LEARNERS

Tasrun Jahan, Md. Mizanoor Rahman & Santosh Panda

Bangladesh Open University (BOU) runs Bachelor of Business Studies (BBS) programme using the self-learning materials (SLMs), radio-TV broadcasts (RTBs), tutorial support services

(TSS). The programme mostly relies on the print which were prepared long back ago and not yet gone through a try-out process. The current research did a quality audit through analysis and evaluation the textbook developed for the BBS and its strengths or weaknesses would have a high impact on BOU students of learning of business. It was therefore important to examine whether it corresponded to the learners' needs of the particular situation, whether it promoted communicative language, learner autonomy, made use of problem solving approaches and whether it allowed for differentiated instructions. The current study uses a 5 point Likert-scale structured questionnaire to acquire the learners' views, attitudes and perceptions on the above areas of the text books. 66 learners were the sample for the study. The study aims to investigate learning and teaching strategies in business through SLMs with particular emphasis on distance learner to the Bangladesh context; to measure the quality of textbooks in relation to familiarity, interestingness, and structural coherence; and to suggest for different approaches to the development of textbook analysis for the BOU. The current research has tremendous implications in the quality assurance process of the BOU.

ALIENATION AT THE OPEN UNIVERSITY OF MAURITIUS: A CONCEPTUAL FRAMEWORK FOR INTERPRETATION OF LEARNER FEELINGS AND EMOTIONS

Teenah Jutton

There is a growing focus on how to widen access and inclusion in higher education, however there is a strong link between alienation and attrition. This study aimed at understanding distance learners' experiences of alienation at the Open University of Mauritius. A qualitative research design was adopted. Focus group discussions and face-to-face interviews were conducted with distance learners both in the system and those who had left. The findings indicate that several factors including isolation, inadequate learner support and institutional presence generate negative feelings and emotions that lead distance learners to experience alienation and to suspend or abandon their studies. The study recommends among other things; learner friendly policies, strategies, a robust learner-centred support system with a strong focus on retention and well-being of distance learners and a deeper understanding of the alienation phenomenon by ODL managers and practitioners.

POSITIONING EMPLOYABILITY AS A CORE OBJECTIVE IN QUALITY ASSURANCE IN OPEN AND DISTANCE LEARNING (ODL)

Theresa Okafor

The rationale for Open and Distance Learning (ODL) cannot remain at widening access alone. It needs to engage with the full meaning of employability and meet the evolving needs of students who require more from a system than just accessing education. This paper argues that one way to make ODL more responsive and relevant would be to incorporate employability as a pursuit and a measure for the effectiveness of quality assurance of ODL. This requires a conceptual clarification of the term employability which is often interpreted as relating to employment. Guided by a classical definition of employability which views the concept as involving the gaining, maintaining, switching of employment and finding fulfilment, external quality assurance regulators are inclined to measure the supply and demand side of employability by indices such as graduate track study and employers

perception of graduates. These indices are insufficient and sometimes impractical. This paper reports the outcome of a research that focused on finding the meaning of employability by those who have a statutory responsibility for quality assurance in Nigeria and South Africa. The research methodology used to obtain meaning, on the application of the concept, is the qualitative research comprising several methods such as the emic and etic approach, interpretivist approach, interviews and review of documents. Reflections on meaning provided by the population sample, demonstrably, have the potential of challenging the deficiencies of quality assurance and will hopefully bring about the full communion with the depth and breadth of quality assurance with regards to employability. The significance of this paper is to recommend a way that ODL can become more robust and shape the permeable career pathways of ODL graduates.

FACTORS INFLUENCING THE ADOPTION OF FLEXIBLE TEACHING APPROACHES IN TECHNICAL TRAINING INSTITUTIONS IN KENYA

Tiony A. K, Kisilu M. Kitainge & Ahmed Ferej

The goal of training in technical training institutions is to produce highly skilled graduates with competencies to handle various challenges in technology oriented fields. The continuing need to improve the quality of education in Technical Vocational Education and Training (TVET) is ever present. This paper highlights the factors influencing the adoption of flexible approaches to teaching in technical training institutions in Kenya. Two specific objectives are addressed here are to establish how the syllabus content influences the adoption of flexible approaches to teaching and evaluate how institutional factors influence the adoption flexible approaches to teaching. The study was guided by a conceptual framework developed by the author. This study was conducted through descriptive research design. Data were collected from seven technical training colleges in Western Kenya. The method of data collection was through open and closed-ended structured questionnaires, and interview schedules. Collected data were coded in SPSS 17.0, and analysed using descriptive statistics. The study established that institutional managers had no authority to develop their own courses that are tailor-made to suit specific needs in the market. The teaching resources that influence the adoption of flexible learning and teaching were also found to be unavailable in classrooms. Most institutions however had put in place strategic objectives to improve the quality of learning and teaching. Outputs from this study are expected to enhance the adoption of flexible learning in technical training institutions. In light of the findings of the study, it was recommended that the government of Kenya should establish a clear policy aimed at greater adaptability to flexibility. Institutions need to be granted authority to develop and reorganise syllabi for provision of industry-specific solutions while being regulated to meet international standards.

PROCESSES INVOLVED IN HANDLING AN AGMOOC COURSE ON NUTRITION: A PERSONAL EXPERIENCE

V. Vijaya Lakshmi, Fariya Khaleel & G. Niharika

MOOCs can provide an access to quality learning opportunities at low cost enabling a small group of teachers/mentors to offer learning services to many people in the duration of a single course. Keeping this in mind agMOOCs was planned out to meet the knowledge

needs of the agriculture community by IIT, Kanpur in collaboration with COL, Vancouver and NPTEL, Chennai. Nutrition being a part of agriculture, an opportunity was provided to handle a course. A course on Nutrition, Health and Therapeutics was developed for the benefit of the society and delivered for 8 weeks from January 11th to March 5th 2016. This course was developed in such a way that it provided knowledge on the foods packed with nutrients to be consumed during health and disease with sanitation. The evaluation of the course included 4 intermittent quizzes and one assignment. The mode of dissemination was lecture cum power point presentation distributed over 48 classes with 8-16 minutes for each class to retain the attention of the learner. These conditions made 60-70% of the learners to have an attentive learning experience. The number of participants registered for the course was 2300 among whom 80% were from India and the rest covering another 25 countries. The participants were very actively involved in forum discussions and messages through hangouts. The relevant references and additional study material was provided and their doubts were clarified by the instructor and three mentors. After the course was completed, feedback was taken and the result showed that 52.9% participants knew about course through friends and 70% were males. About 73% participants in the age group of 17-34 and were students (61%). Most of them used their computers for learning (66%). Many of the participants expressed that they could bring about some change in their diets and their family's diet.

A STUDY OF MEDIATING EFFECT OF ATTITUDE ON PERCEIVED EASE OF USE AND STUDENTS INTENTION TO USE ONLINE LEARNING PLATFORM AMONG ONLINE LEARNING INSTITUTIONS IN MALAYSIA

Zahir Osman, Noral Hidayah Alwi & Bibi Nabi Ahmad Khan

The purpose of this study is to develop an understanding on the mediating effect of attitude on perceived of use and students' intention to use online learning platform in Malaysia. In this study, Perceived ease of use is defined as a degree to which a student believes that using an online learning platform would be free from effort. Attitude is defined as the probability that a person will show a specified behavior in a specified situation. Intention is the person's readiness cognitive representation to carry out a given behavior. The Structural Equation Model (SEM) was used to analyze the casual relationships between the independent variable, mediating variable and the dependent variable. The model was developed and later tested by adopting the Partial Least Square (PLS) procedure on data collected from a survey on online distance learning (ODL) students in Klang Valley that yielded 305 usable questionnaires. The results showed that attitude is partially mediating the relationship between perceived of use and intention in students' intention to use online learning platform in Malaysia. It is important to do the study utilizing experimental design by capturing longitudinal data in online learning platform using robust measures. The findings imply that the relationship between attitude and the willingness of the students to use online learning platform may dwell in attitude's influence on students' intention, and that attitude plays crucial function within the ODL institutions.



ABSTRACTS

Sub-theme:

**TECHNOLOGY AND
INNOVATION**

LEARNING ANALYTICS: A DYNAMIC INNOVATIVE APPROACH USING ICT TO IMPROVE TEACHING AND LEARNING IN DISTANCE EDUCATION

A. Murali Rao

Learning analytics is a dynamic innovative approach and plays a vital role in analysing and reporting data for the purpose of improvement in teaching and learning processes using Information and Communication Technologies (ICT) in open and distance education system. As the traditional distance education system is moving towards online education, the learning analytics using ICT tools help to assess and predict the factors of success and failure in teaching and learning processes. Learning analytics also facilitates in developing better pedagogies, enhancing quality in teaching and learning, to address and reduce dropout rates, focus on learner individualised attention with their behavioural patterns and achieve academic intelligence. The paper mainly emphasis on designing of a holistic system framework that consists of three main components viz virtual learning environment (VLE), data processing and analysis, and knowledge-base. The paper describes critical review on learning analytics and institutional best practices, explain the structure of system framework and its functions. The paper also discusses the learning analytics advantages and its outcome, issues and challenges and how learning analytics help in reducing dropout rates. Finally, the paper concludes on how learning analytics play a vital role to improve teaching and learning processes to achieve academic excellence in distance education using information and communication technologies.

THE IMPACT OF E-LEARNING APPLICATION ON LEARNING STYLES AMONG STUDENTS OF THE NATIONAL OPEN UNIVERSITY OF NIGERIA

A. S. Gidado & N. L. Garba

Research was conducted to investigate the impact of E-learning application on learning styles among students of the National Open University of Nigeria (NOUN). One thousand students were randomly selected from the over 60 study centres of the university. A pretested self-developed 35-item questionnaire was used for data collection. The reliability co-efficient of the instrument stood at 0.90. The data collected were analyzed using frequency distribution, mean and t-test. The findings revealed: acute shortage of E-learning materials such as e-mail facilities, video/tele conferencing, multimedia, computer and internet facilities, such as projectors, photocopiers and scanners. In addition, the few available ones such as off-line/desktop computers, printers and ready-made courseware were not fully utilized because of lack of network connectivity and power failure. The findings also revealed strong impact of E-learning application on students learning styles. It was recommended among other things that, the students should carry out a test to know the impact of the E-learning on their learning styles type. The school should improve and provide sufficient learning materials for use by students. Tutors should be trained and retrained through in-service training, seminars, workshops and conferences for acquisition of skills needed for E-learning application in NOUN.

ACCEPTANCE OF TABLET APPS FOR E-LEARNING BY SENIOR USERS: A TEST OF UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY

Adnan Riaz & Afia Adnan

Learning is a continuous process. The contemporary environment emphasizes also on de-learning and re-learning. This prompts the need to acquire knowledge and develop skills throughout the life cycle. Employees belonging to different sectors and hierarchical levels can now continue education through e-learning. Particularly considering the senior students (50+ years of age), they are more reluctant to accept technological resources. This study mainly examines the acceptance of Tablet PC (TPC) apps as a learning tool among senior users and what factors may accelerate TPCs use. Unified Theory of Acceptance and Use of Technology (UTAUT) was applied with slight modifications and responses of 173 senior users were collected. Results not only unfolded the repulsive behavior of senior students' to use TPCs as learning device but also highlighted the influence of performance expectancy and facilitating conditions if policy makers wish to increase tablet apps use.

SOCIAL MEDIA AS MASSIVE OPEN ONLINE RESOURCE (MOOR) AND THE PERFORMANCE OF FRANCOPHONES LEARNING SPOKEN ENGLISH IN CAMEROON: A CASE STUDY OF THE TRILINGUAL STUDENTS IN THE DEPARTMENT OF APPLIED FOREIGN LANGUAGES, UNIVERSITY OF DSCHANG

Afutendem Lucas Nkwetta

This paper examines the performances of students using social media as a Massive Open Online Resource (MOOR) - Facebook, Messenger, WhatsApp, Viber, IMO, Linked In, SMS, Wikis and Cambridge Advanced Learners Dictionary (CALD4) in learning Spoken English in the bilingual context of Cameroon. Many Francophone learners of English tend to have few opportunities to learn, use and practice the English language. English is considered a Minority Official Language (mOL), as opposed to French, which is a Majority Official language (MOL) in Cameroon. This study investigates the position of social media as a MOOR and how Francophone student performances in the English Language learning can be enhanced through it. The study addresses three major questions, using social media as a theoretical framework:

1. Is it possible to use social media in language teaching and learning English to large classes in the context of Cameroon?
2. Does the use MOOR increase students' motivation in language learning?
3. Does the use of MOOR increase spoken English performances of learners?
4. What are the roles of social media in promoting learners' autonomy?

Data were collected with appropriate tools for investigating the following hypotheses:

1. It is possible to use social media in language teaching and learning in the context of Cameroon?
2. The use of Web 2.0 technologies will motivate students in English language learning.
3. The use of social media as MOOR will enhance Francophone students' knowledge, understanding, and language abilities in speaking, listening to English.
4. The regular use of social media as MOOR in Cameroon will promote learners' autonomy.

The study was carried out within four years: from 2012-2013 academic year to 2014-2016. Through questionnaire, interviews, observation and evaluation exercises we got some insight into how learners actually perceive and use social media Massive Open Online Resource in their daily activities and when learning foreign languages, especially English. A significant 85% of the respondents attested that their Spoken English language performances had increased tremendously because of the constant usage of social media facilities. 95 % said that their attitudes and motivation in English had increased significantly and they were even ready to specialize in English Language Culture studies at the postgraduate levels. The conclusion drawn from the results is that students perform better and gain new information from social media use as Massive Open Online Resource in and out of the classroom than they do from their lecturers in the traditional classrooms and public libraries approaches.

ROLE OF EBOOK TOWARDS INNOVATIVE AND EFFECTIVE ODL LEARNING IN BANGLADESH

Akm Iftekhar Khalid

eBook has been extensively adopted in open and distance learning (ODL) institutions because of its wonderful characteristics of instantaneously deliverable capacity and easily usable in any reading device. In 2013, Bangladesh Open University (BOU) launched a website (<http://www.ebookbou.edu.bd/>) on eBook for facilitating web-learning and the university made approximately all modules of its major academic programs available for the learners from secondary school certificate programs to graduate programs. This study exposed how effective is the eBook for contributing towards the learning and what is the status of innovative learning through eBook in Bangladesh and the research was really appropriate as no research initiative was taken to understand the efficacy and innovativeness of eBooks since the commencement of the eBook website from the university. To perform a comprehensive analysis, this study included randomly 59 learners from different academic programs of the university and the respondents were served questionnaire and they were interviewed individually and in groups to investigate how they used or use the eBook facility for learning. The respondents told their comments, success, ICT difficulties and elevated ideas to deal with innovative learning. For ODL, web-based learning facilities are inevitable to ensure quality learning and because of technological advancement, innovation for learning is coming each day while the learners need to have the aptitude for development themselves and besides, institutions must upgrade and adopt new innovative approaches to be user-friendly with the learners. This paper has explored the experience of learners and narrated to share with ODL practitioners, ICT leaders, educators and policy makers.

DEPLOYING DIGITAL SET TOP BOX (DECODERS) TECHNOLOGY AS DIRECT-TO-HOME (DTH) FOR THE DELIVERY OF (OER) DIGITAL CONTENTS TO ENHANCE TEACHING AND LEARNING IN ODL: ITS POSSIBILITIES AND CHALLENGES

Amadasun Osamuyimen

This proposal would investigate and suggest the use of Television Decoders, which receives signals from a broadcasting station via direct satellite; as a platform for the delivery of Digital educational contents to Open and Distance Learning (ODL) users. With the proliferation of TV decoders (e.g. GOTV, DSTV, ACTV Darsat etc) in Nigeria, Africa and the world at large, the people especially students become more aware of the technology, as they often purchase and use them for home entertainment only such as for sports (Soccer), movies, films etc. The TV decoder can be more useful for both educational and entertainment purposes, Hence the need for possible creation of video lectures (ODL only) as channels which can be located on FREE to AIR zone (in compliance with OER), for broadcast on the TV decoder. It has high quality TV reception even in rural areas, since its uses wireless technology, it has value-added service such as internet, email, e-commerce etc. The TV Decoders is part of information Technology that can help to equalize the distribution of high quality OER digital contents all over the world. In particular, having learning materials freely available for adaptation and re-purposing can expand access to learning of better quality at lower cost. a campaign to make freely adaptable content known as open educational resources (OER) widely available is gradually gathering momentum. Also in this Proposal, I shall briefly take a look at how DTH works, its main components and challenges, secondly, the Tools and Resources to help guide the creation, use and sharing of OER content and TV decoder as the technology to support the hosting and management of them for delivering to users (students and teacher), since leveraging on internet is facing challenges in Africa etc.

ROLE OF MOBILE BASED INFORMATION SERVICES AND SOCIAL MEDIA FOR THE DEVELOPMENT OF FISHER FLOKS FOR THE IMPROVEMENT OF LIVELIHOOD

Ananth A

The mobile phone based communication technology and social media access open the world to access and share enormous information access by common man particularly those who last mile can fetch information and chat with the any one whether fellow fishermen or experts by easy way by the internet facilities. Simultaneously the usage of social media is terrifically increased in large among the youth groups. Social media is the grouping of individuals into specific groups, like small rural communities or a neighborhood subdivision, if you will. Although social networking is possible in person, especially in the workplace, universities, and high schools, it is most popular online. So it is important to understand the social impacts of these developments. The experience is shared about mobile based fisher friend application for the decision making support system about the potential fishing zone consists of GPS coordinates of potential fishing, international border alerts, traditional fishing zones, sailing path ways with return support information, ocean state forecast information (about within 10-15 Kms)via wind speed, wind direction, wave height information are helped the fisher folk to take decision. All these are about local specific information.

M-LEARNING: AN EXPERIENCE AT NETAJI SUBHAS OPEN UNIVERSITY

Anirban Ghosh

The educational systems of the developing countries are facing almost the same problems i.e. the rising costs in the face of budgetary constraints, lack of curriculum reform, want of good learning materials, scarcity of trained teachers which lead to low quality of education and very limited access to higher education for the rural and disadvantaged people. In this situation, education of masses is one of the biggest challenges being faced by a populous country like India. The distance education system differs from the formal system of education not only in innovation and instructional design but also in the use of non-print electronic media. Thus communication technologies play a significant role in imparting knowledge. A flexible and customized instructional system is the most important innovation of the open and distance learning mode which serves a diverse groups of students with differing age, academic background, belonging to all walks of life and scattered over a wide area including remotest villages. The electronic devices, more specifically the mobile devices are capable of overcoming the barriers where distance exists and has the potential to change the very nature of instructional process. Netaji Subhas Open University imparts different courses having around 3.20,000 students on roll. The University has recently taken initiatives to deliver its educational content through mobile technology. A survey was conducted among the students of teacher training programme. The result was very encouraging that mobile technology helped in bringing the educational content to the students very effectively. It is a new learning experience for the students who live in remote places and cannot have the opportunity to hear the lectures of eminent teachers. The paper highlights the experience of M-learning in the 21st century education and how the students are taking the advantage of mobile technology to get their academic content effectively.

GETTING THE RIGHT MIX: THE RELATIONSHIP OF STUDENT-INSTRUCTOR AND STUDENT-STUDENT INTERACTION IN DETERMINING STUDENT LEARNING AND MOTIVATION IN FLIPPED CLASSROOM MODEL

Anuradha Gungadeen

The integration of technology into higher education classroom presents an opportunity to transform and revolutionise traditional pedagogy. According to scholars and practitioners, it is reported that there are positive outcomes of a flipped approach to instruction (Baker, 2000; Lage, Platt, & Treglia, 2000; Bergmann, 2011; Wright, 2011; Pearson, 2012; Butt, 2012; Bates, 2012). Additionally, the total number of instructors has stated successful implementation of the strategy provides some evidence of its powerful use as an instructional method. In a flipped classroom approach, it is instrumental that there is a right mix of interaction between student-to-instructor as well as student-to-student. However, there is a limited literature that exists on the relationships between student-to-student and student-to-instructor interactions. This study explores relationship between student-to-instructor and student-to-student interactions in determining student learning and motivation in Flipped Classroom Model. The sample population consisted of trainee educators enrolled multiple academic disciplines in a Teacher Education Institute. An online instrument was designed to capture trainees' characteristics, their perceptions of learning, motivation, student-to-student interactions and student-to-instructor interactions. Keeping in view the nature of

relationships among variables, regression analysis was employed to analyse the findings. The results revealed that the quality and timely student-to-student and student-to-instructor are determining and significant contributors of student learning and motivation.

LECTURERS' INNOVATIVE STRATEGIES IN E- LEARNING: IMPLICATION FOR SCIENCE EDUCATION

Apata Susan

The use of e-learning technologies has attracted greater attention over pedagogy in Nigeria. As such, knowledge of lecturers' innovative strategies in e-learning that is germane to skills development, core competences, learners' retention and good performance, remains a major source of concern in pursuing quality science education which the nation is aiming at. While educationists find new ways of improving the learning processes in developed countries, awareness and usage of these innovative strategies is still very low especially in Nigeria. Low level of awareness has been discussed as the major causes for non usage of innovative strategies. This paper therefore examined the types of innovative strategies such as gamification, interactive videos, story-based, scenario-based, guided exploration, Social collaborative e-learning, competition based e-learning, flipped class room, immersive as well as the advantages the disadvantages of each innovation with consideration for conditions under which each can be applied in e-learning. The paper also looked into the implications of the innovative strategies for Science education. The paper concludes by recommending ways of promoting innovative strategies to be adopted or adapted by lecturers using e-learning. Such include public campaigns, seminars, workshop, instructional media that are e-learning pedagogy oriented and giving equal attention to technological implementation and pedagogy in e-learning.

A VIDEO PLATFORM TO PRODUCE, SUPPORT, AND SHARE EDUCATIONAL ARABIC CONTENT

Athra Alawani, Alain Senteni & Abtar Darshan Singh

Technology has contributed greatly to the evolution of modern educational systems. Video technology can be a genuine educational tool. Recently, free video-sharing sites have helped to create and share an unlimited number of short video clips. This unprecedented increase has occurred due to easy access to digital media anywhere and anytime. Despite the abundance of recorded video materials, there is a severe shortage in high quality video content in Arabic dedicated to educational purposes. Therefore, a novel, well-designed system is highly recommended to enable volunteering teachers to create relevant educational content in Arabic and share it readily and easily with other teachers. This paper proposes the conceptualization of a web-based video sharing platform supporting the United Arab Emirates (UAE) MOE curriculum. Its main purpose is to ensure a gradual build-up of high quality videos in a repository for both teachers and learners in UAE schools in a seamless manner and suited to the MOE needs. The recommended site will incorporate as many intelligent capabilities to enable self-regulatory push-pull content for teachers to use whenever there is a need.

EFFECTIVENESS OF A CAPACITY BUILDING INTERVENTION FOR OER SEARCH AND INTEGRATION FOR COURSE MATERIALS DEVELOPMENT

B. Phalachandra, Mohandas Menon, Jasmine Selvarani Emmanuel & Chng Lay Kee

There have been a number of initiatives in the last decade that led to the creation of courseware and other resource materials with open licence enabling free and wider use among practitioners. This OER movement was expected to make available quality learning materials for classroom use as well as for developing ODL course materials. Adoption of OER materials and contextualising them within a new teaching-learning context also needed adequate skills on the part of the new users. Institutions also need to have their own OER policies to systematically adopt implement Open Educational Practices in all facets of their teaching-learning activities. The Wawasan Open University has been one of the pioneers in the adoption of open educational practices in its course development and delivery. It initiated deliberations within its governing bodies as well as academic community regarding the possibility of OER adoption right from 2010. This led to concerted efforts on the part of a team of senior academics in the University for developing awareness about OER and OEP and build capacity among its academic and academic support staff to adopt open educational practices mainly for course development. As of now, fourteen courses at both undergraduate and post-graduate levels have been developed by fully or partially using available OER materials. WOU in collaboration with CEMCA and COL developed OER materials that were delivered as MOOCs in 2015. WOU is in the final stage of a research project entitled OER Integration in e-Learning Materials on Research Methodology in Education, the findings of which are expected to provide more insight into the OER adoption and integration for developing course materials in open distance learning. As part of this project WOU developed a mechanism to enhance capacity among the potential users of OER to identify, integrate and use OER for teaching and learning. It is expected that this workshop will be able to develop adequate conceptual understanding of OER and OER adoption among the participants as well as inculcate a positive attitude towards OER use. This project is one of the sub-projects under a larger meta-project called Research on Open Educational Resources for Development (ROER4D) supported IDRC, Canada. The present paper attempts to discuss the processes involved in designing and implementing the capacity building workshops conducted in India, Malaysia and Sri Lanka and its impact/effectiveness on about 200 participants constituting students and educators of higher education with respect to conceptual understanding of OER and attitudes towards OER.

EXPLORING USE OF VUSSC LIFE SKILLS OER AMONG IN-SERVICE TEACHERS: A CASE STUDY

Bholah Ravhee

We live in a complex and challenging world. Children and adolescents are now faced with many serious issues and decisions regarding their own life and they are expected to learn the life skills they need to live happy, healthy and successful lives totally and on their own. The need for concepts related to life skills has thus been increasingly felt in our contemporary society. This paper highlights the status of life skills in current formal, informal and non-formal education in the Republic of Mauritius; but, mainly focuses on the use of Virtual University for the Small States of the Commonwealth (VUSSC) life skills open educational resources

(OER) during a teacher training programme for a group of in-service Pre-vocational teacher trainees. The study therefore aimed at investigating the use of the VUSSC life skills OER among them. The objectives were to firstly explore the effectiveness of OER in developing relevant knowledge, skills and attitudes among these teachers, both in thematic risk areas and general psychosocial skills and also, examine how the teaching approaches used motivated and promoted meaningful learning among them. The research design involved a descriptive and interpretive case study that was analysed through qualitative method. The pre and post instruction of such life skills VUSSC OER on the above teachers were measured using different data gathering tools such as checklist, worksheets, interview and reflective diary. Data obtained was thoroughly examined, coded and computed using relevant software. A critical analysis of the life skills OER shows that it provides the minimum essential life skills content for the given teacher needs. The findings also tend to show that this VUSSC OER increased better understanding of various concepts especially those related to sexuality and substance abuse among the teacher trainees. However, the use of examples and case studies especially from local contexts to support various life skills concepts was recommended. These life skills OER can be revisited and made more activity based, reader friendly and supported with a range of technologically supported materials such as relevant animation, videoclips, concept maps (e.g IHMC) and concept cartoons.

WHAT MOBILE DEVICES MEAN TO THE 21ST CENTURY TEENAGERS?

Ch'ng Lay Kee & Jasmine Selvarani Emmanuel

According to Pew's research report on teens and technology in 2015, 92 percent of the sampled teenagers go online daily and more than 50 percent of them use their smartphones several times a day. Today, teenagers and mobile devices are almost inseparable. Although many quantitative studies have been conducted to identify the perception on the integration of technology in education, only a few in-depth studies have been done specifically on the usage of technology by teenagers, as well as in learning. Therefore, a study was conducted to obtain an in-depth understanding of teenagers' usage of technology in Malaysia by employing the mixed method. Three males and three females aged between 13 and 17 years were selected to participate in this study. A checklist was used to track and identify the usage level of mobile devices among these teenagers, the main activities performed by them using these devices and the learning experience of using them over a period of two years. The first set was done in 2013 and the second one was conducted in 2015. Participants were also invited to take part in a subsequent interview session, following the first interview which was held two years ago. This paper addresses the changes of the teenagers' usage patterns on mobile devices, their experiences of using mobile devices to perform learning activities and perspectives on mobile learning over the designated period of two years. The findings reveal that teenagers are great digital explorers. Mobile devices have become an essential tool for a majority of them. Throughout these two years of tracking, it was observed that the teenagers did not keep to the same interests for long. Instead, their interests shifted over new games, new apps and interesting sites or videos. These teenagers admitted that they like to keep themselves preoccupied with different activities that can be performed using mobile devices. Some teenagers were aware that they were addicted to using mobile devices, especially their Smartphone to some extent. Without the mobile devices, teenagers felt "lost", "bored", "insecure" and "disconnected". Ironically, teenagers did not use their devices for learning consistently. They were only very occasionally used for some learning activities. This paper found that mobile devices are mostly entertainment devices for the

teenagers to pass their time. As for the learning part, older teenagers are able to make use of such devices more efficiently compared to the younger ones, probably because the older group is more self-directed.

SEPARATING RHETORIC FROM REALITY: THE PROCESS OF INSTITUTIONALIZING OER PRACTICES AT AFRICAN UNIVERSITIES

Catherine Ngugi & Neil Butcher

OER Africa is working with four universities in Kenya, Tanzania and South Africa to support the deepening of pedagogical practices that employ open educational resources (OER) and use information and communication technologies (ICT) to improve teaching and learning at both faculty and institutional levels. Concurrently, we are seeking to build an evidence base from the emerging lessons of experience, which would give impetus to the application of similar strategies in other African institutions of higher education. A growing willingness amongst institutions to engage with the concept of OER and to harness OER practices to improve quality is reflected in the work to date. It is, however, evident that universities typically place relatively limited focus on improving teaching and learning practices. Other academic activities, particularly academic research and administration, tend to take precedence over establishing a strong culture of improving students' educational experiences through systematic research and investigation. In light of emerging lessons, this paper explores barriers to deepening a culture of implementing research-based pedagogical change in African universities and proposes possible mitigation strategies.

FORMULATING AND IMPLEMENTING AN INSTITUTIONAL OER POLICY TO IMPROVE PRACTICE: A STUDY OF PROGRESS OF AN OER BASED M.ED PROGRAMME AT IDE, UNISWA

Chandraiah Esampally, Vilakati Nokuthula & Njabuliso Nsibande

The benefits of Open Educational Resources (OER) based programs are not yet fully realised in mitigating some of the constraints faced by higher education institutions in developing countries. For example the University of Swaziland is under-funded with few or outmoded teaching and learning resources. Even when textbooks are available, they are expensive and unaffordable to a majority of students. There are limited resources to support continuous staff training and development for teaching and learning enhancement. Yet the concept of OER has grown and has met with initial success, wherein many Educational institutions have begun to offer educational programs through OER based courses to meet diverse educational needs. However, there is an absence of an enabling learning strategy or new policy directions at many institutions. With the support of the Commonwealth of Learning, the University of Swaziland (UNISWA) has organised a series of workshops to sensitize academic staff on the potential benefits of OER based programs to widen access to higher education. The UNISWA Institute of Distance Education (IDE), in collaboration with the Faculty of Education, are in the process of implementing a Master in Educational Leadership to be offered in the 2016-2017 academic year. To ensure an enabling environment for such a program, the UNISWA formulated an institutional OER Policy in March 2016. As such the intended objectives of this paper are to: (i) analyse the contextual factors that are considered during the redesign of courses for the OER

based M.Ed in Leadership program; (ii) examine opportunities and challenges encountered during the process of developing an institutional OER policy; (iii) exemplify how new OER policy directions can inform the implementation of an OER based program to enhance the quality of open and distance learning. Data will be collected from UNISWA management and lecturers who are already exposed to OER. This paper will inform educational planners and educators on how to improve practice through new OER policy directions.

A PRACTICE BASED APPROACH TO THEORISING DIGITAL EDUCATION LEADERSHIP

Cheryl Brown, Laura Czerniewicz, Tabisa Mayisela & Cheng-Wen Huang

This paper conceptualises a holistic approach to digital education leadership, presenting the argument that digital education leadership is grounded in the practice that it seeks to foster (digital literacy practice) and the processes involved in teaching that practice (digital education). In other words, digital education leadership cannot be viewed in isolation, separate from digital literacy or digital education. The foundational dimensions of the digital in this framework are premised on understandings of literacy as social practices. In brief, we understand that literacy involves sets of practices which are tied to domains of practice (e.g. learning). Furthermore, because literacy is about being able to participate in social practices, and because the contemporary world is technology saturated, then in order to create a life for oneself, one needs to be capable of participating (living, learning and working) in this evolving digitally mediated society. The paper presents a new conception of digital literacy, digital education and digital education leadership, and the relationship between them. The conceptual framework presented arises from a collaborative project across eight Commonwealth countries; it will be used as the basis of a curriculum to be implemented to support digital education leadership. The paper will also discuss the challenges faced in terms of conceptualising digital education leadership in the Commonwealth context and the processes used to address these challenges.

INTEGRATING WHATSAPP IN TEACHER COLLABORATION: AN ACTION RESEARCH

David Turuthi

Information Communication and Technology has for years been used to improve teaching, learning and teacher learning. On-Site Teacher Professional Development is key if teachers will be at par with the fast changing world of technology. Since technology is as good as the user, teacher educators must focus on hand-held-technologies that are ubiquitous and that practicing teachers are comfortable using. In Kenya almost every adult owns a mobile phone with 70% of hand-sets (Smart Phones) owned by teachers having WhatsApp application. Additionally, most Smart Phones come with in-built video recorders. By subscribing to available, affordable and flexible data bundle regimes, social-media users are able to send and receive video-clips. In this paper the researcher presents his experiences of using WhatsApp to share video-clips of well prepared mathematics lessons in the teaching of topics that cut across all levels of learning. This was a participatory action-research design carried out among teachers in one secondary school in Nakuru County, Kenya. Purposive

sampling was employed to select a school with several teachers of Mathematics of both gender who owned a smart phone. Data collected was the iterative action-research process. The study found that, One-Minute-long video-clips shared through WhatsApp, passed vital homegrown information horizontally and vertically while they raised the motivation of teachers. Social-Media and in particular WhatsApp was found to be a realistic strategy in which members of one department learnt from the knowledgeable other in their workstation thus strengthening their learning community and shared professional experience. The study recommends a county/country-wide study be carried out to see how well the success of this single case can be replicated.

OPEN EDUCATIONAL RESOURCES AND PRACTICES AT THE UNIVERSITY OF THE SOUTH PACIFIC: STATUS REPORT AND FUTURE DIRECTIONS

Deepak Prasad, Dhiraj Bhartu & Javed Yusuf

Open educational resources (OER), which are cost-free, openly licensed educational materials available in a variety of languages and formats, have in recent years accumulated abundant evidence of disruptive potential to surmount barriers to learning. This is certainly good news to the world of education, especially higher education, which has experienced steady growth in its cost to students. Evidence also shows, however, a low uptake of this concept in higher education. A key reason for this is a lack of awareness, understanding, and acceptance of OER and their related practices amongst faculty. If one intend of a higher educational institution, such as is that of the University of the South Pacific (USP), is to provide greater affordability for students through OER, ushering faculty towards OER is thus paramount, for they are the ones who normally choose and assign educational resources. As an initial step toward moving the USP closer to its aspirations, a survey study was undertaken aiming to describe the current status of OER uptake and open educational practices (OEP) by faculty, with the purpose of gathering information for planning future activities in this area. This paper reports results from the survey examining USP faculty: teaching practices, OER awareness, OER use, participation in OEP staff development, awareness of student OER use, barriers to OER adoption, and impact of OER use. The paper concludes with a discussion of possible future directions for OER initiative at the University.

TECHNOLOGY-ENABLED ENVIRONMENTS FOR FLEXIBLE LEARNING: A CASE STUDY AT THE UNIVERSITY OF THE SOUTH PACIFIC

Dhiraj Bhartu, Deepak Prasad & Javed Yusuf

The introduction of technology-enhanced learning and teaching environments has been a challenge for many educational institutions in terms of providing adequate, effective and efficient ICT tools to enrich the delivery of learning and teaching. Spread across 33 million square kilometers of Pacific Ocean, the University of the South Pacific (USP) encompasses 12 island nations, and thus, the transactional distance between students and teachers represents a multitude of challenges. To deal with these challenges, the University continuously strives to leverage ICT in education. In this paper, the authors describe the innovative approaches and ICT tools used by USP to deliver its courses across its 14 campuses so as to provide the best possible learning experiences to its over 29,000 students who maybe enrolled in

any of the four modes of delivery: face-to-face, print, blended and online. The paper will also focus on the strategies, challenges and successes of various ICT tools used to enhance student learning experiences so as to meet the growing demand for ICT-enabled learning and teaching at the USP.

DEVELOPMENT OF INTERACTIVE ONLINE LEARNING MODULES: LESSONS FROM KENYATTA UNIVERSITY, KENYA

Elizabeth W. Mwaniki, Mukirae S. Njihia, Fatuma N. Chege & Anthony M. Ireri

Kenyatta University established the Open and Distance learning (ODL) programme in 2003. At its inception, the programme was reliant on print modules which were distributed to the students enrolled in the programme. In 2014, the university embraced the concept of e-learning and changed the programme's name to Virtual and Open Learning. Despite the change of name, the instructional materials and pedagogical approach have not changed much to reflect this shift. The current print modules have very little interactivity as would be expected of an effective online learning. This may largely be attributed to course facilitators' lack of capacity to not only develop interactive online modules but also to e-teach. To address this problem, Kenyatta University's School of Education in collaboration with the Commonwealth of Learning trained three academic staff from each of its seven departments on development of interactive modules from 26th October, 2015 to 6th November, 2015. After the training, the members formed departmental teams of two staff and were able to convert the soft copies of selected print modules into interactive modules. The trained academic staffs are expected to cascade the skills acquired to the untrained staff members in the university. Despite the challenges faced in the development of interactive modules, there are important lessons that are worth sharing. The lessons may inform other institutions of higher learning desirous of making their online programmes more supportive, collaborative and effective.

INNOVATIVE USE OF WHATSAPP: FROM ACADEMIC DISRUPTOR TO ACADEMIC PERFORMANCE ENHANCER AT NIGERIAN TERTIARY EDUCATION INSTITUTIONS

Eucharia Chinwe Igbafe

The negative perception of the WhatsApp function as an academic disruptor seems to have limited many institutions, lecturers and students from benefiting from its growing contribution to education. WhatsApp has functions that are accessible, fast, and cheap and they can be employed for the achievement of educational purposes. However, few institutions offer students with support services to build their capacity to navigate WhatsApp as a mode of possible academic disruption or achievement. I relied on a qualitative approach to investigate WhatsApp as both an academic disruptor and academic performance enhancer in tertiary education institutions. Participants were selected from two universities namely public and state universities. Snowball purposive sampling allowed me to select twenty students capable of providing deep insight into WhatsApp and education with informed consent. Data which were collected through semi-structured interviews were analysed according to the following three domains viz.: academic disruptor, academic performance

enhancer and sustainable capacity to navigate possible disruption. The findings reveal that WhatsApp can cause academic disruption through addiction to non-educational communities, but can also enhance academic performance through building and improving students' community of learning. This study found that students without skills to navigate WhatsApp addiction suffer from cognitive frustration, feelings of emotional emptiness and loneliness. In conclusion, institutions, lecturers and literate friends and family members can enhance students' academic performance through WhatsApp functions by expanding the community of learning to enable them to acquire and share knowledge.

DESIGN AND IMPLEMENTATION OF REAL TIME E-LECTURING SYSTEM

Fasasi Adebayo Adebari, Ibrahim Adedotun Abdul & Asafe Nureni Yekini

Advancement in information and communication technology (ICT) is making video streaming a viable way of getting a real-time event to people anywhere in the world through computer systems and handheld devices. In teaching and learning, ICT have successfully added values to the process through the Internet. In this research, the process of delivering lectures in real-time to a wide audience was considered. A real-time e-Lecturing system was designed and implemented to aid easy communications between the teacher/trainer and the learners in different locations. The system grouped the learners into two. The first group is located in traditional-like classrooms without the trainer being with them. The learners can communicate directly with the trainer through full-duplex mode of communication using a projector with necessary audio-visual systems connected to a computer system. The trainer can see the trainees as in the traditional classroom through the computer system. The second group comprises connections through handheld devices and connected through simplex mode of communication. They can view and listen to lectures in real-time but cannot communicate with the trainer in real-time. The research shows a better way of blending traditional classroom with other learners located in different environment. It also proved to overcome the barrier of distance in learning and give some degree of flexibility to the learner to decide where to receive lectures. The system will be useful for institutions operating multi-campus system and/or for courses involving large number of students without correspondingly large classroom/lecture halls.

TECHNOLOGY LEADERSHIP FOR TECHNOLOGY LITERACY: RE-POSITIONING THE SCHOOL LEADERSHIP

Felix Mndenyi Mwawasi

With the advancement of emergent technologies in this 21st century and demands for new knowledge and skills in the knowledge economies, there has been need to shift focus from traditional approaches to teaching and learning -that is teacher directed, to more engaging collaborative approaches in learning, aided by available Information, Communication and Technologies (ICTs). Pedagogy, thus, has changed to meet the new learner needs; both immediate and those projected in future. One key area of change is the incorporation of technology in teaching and learning, eliciting the need for teachers to acquire new knowledge and skills such as Technological Pedagogical Content Knowledge (TPACK). However, Sub-Saharan Africa, as are some parts of developing Asia, seems to lag behind in incorporating this necessary paradigm shift. Kenya, as a country in this context, is one

good example in this category. This reflective paper, thus, gives an over view of the change and critically evaluates the contextual potential, that is begging to be tapped into, as well as the constraints that may be restraining progress in transforming classrooms to become less restrictive in incorporating 21st Century skills requirements; at the centre of which is Technology Leadership as enacted by school leaders at school level. It then explores ways of re-positioning the school leadership for this change.

BUILDING A VIBRANT ONLINE COMMUNITY THAT TRANSCENDS GEOGRAPHIES, DISTANCE, CULTURES AND TRADITIONS AND LEVERAGING THE EXPERTISE AND EXPERIENCE OF PARTNERS

Frances Ferreira

GIRLS Inspire is a Commonwealth of Learning (COL) project designed to leverage the power of open and distance learning (ODL) to end the cycle of child, early and forced marriage (CEFM) and to address other barriers that prevent girls' economic participation. Through the use of ODL, community organisations and institutions in Bangladesh, India, Mozambique, Pakistan and Tanzania are mobilised to provide schooling and skills training to girls and women. With funding from the governments of Canada and Australia, GIRLS Inspire aims to reach some of the world's most vulnerable and hard-to-reach women and girls through technology-enabled learning. To convince girls, community leaders and parents that girls can access education in a safe and gender-friendly environment, institutions' capacity to offer technology-enabled learning need to be strengthened. GIRLS Inspire committed to creating a network through an online community of practice (CoP) as one of the strategies to enhance the capacity of partner organisations. Through this CoP, conscious efforts are made to form a strong network among the partners and other development agencies for knowledge exchange and capacity building that transcends geographies. Using a case study approach, this paper will explore (1) the innovative use of technology to build a vibrant online CoP (2) the factors contributing to partner engagement on the online community and provide (3) evidence on how partner's capacity were enhanced through the CoP on issues such as CEFM, Gender Equality; Monitoring & Evaluation; community engagement; and online strategies for awareness raising. The following data collection methods will be utilised: direct observations, participant observation, interviews and document analysis. It is envisaged that this paper will contribute to sustainable practice of capacity building, as it captures the change taking place over time and varying geographic regions which can be used to measure the progress of this project as envisaged in its theory of change.

INTERNET OF THINGS: THE INEVITABLE TECHNOLOGY FOR PROVISION OF EFFECTIVE QUALITY EDUCATION

Francis Wambua

In recent times the Internet of Things has witnessed high level of adoption in the world of technology. It is a hot research topic in the world of computing. It is made up of billions of "smart" devices from miniscule chips to mammoth machines that use wireless technology to communicate with each other. It is a highly efficient integration of product, information systems and physical systems, which is becoming widely used in education for quality and effective learning; the Internet of Things affects the way we see and do things in our day to

day life. This article describes the Internet of Things and analyzes case studies done on its use in education setup; the paper describes its application in the learning environment; It further explores the implications of internet of things in terms of quality, security, efficiency, and financial aspects in learning environment. The paper shows that, the use of Internet of Things in learning environment can drastically improve the quality of training and learning; it finally proposes more research to be undertaken on this area in order to avail the hidden potential of its application in education.

EXTENDING THE MOOC FOOTPRINT: SUPPORTING CAPACITY BUILDING IN INDIA

Freda Wolfenden, Simon Cross & Fiona Henry

Higher education institutions across the world have enthusiastically embraced the MOOC phenomena for multiple motives; to advance the reach of their social justice missions; to promote their accredited provision; to experiment with new modes and styles of teaching, and so on. Our ambition in using a MOOC was very different; we drew on the affordances of an established MOOC platform, Open EdX, to extend the reach and impact of a large scale open programme (TESS-India) focused on improvements in teaching and learning in seven states in India (www.tess-india.edu.in). TESS-India aims for pedagogic transformation for teachers working in elementary and lower secondary schools through participation in the practices of the TESS-India OER. Within the design of TESS-India the MOOC was intended to play a critical role in supporting the capacity building of teacher educators to close the policy-practice gap and support engagement of teachers with the OER. This paper describes how we addressed the broader programme demands in the design and delivery of the TESS-India MOOC to attract over 10,000 registered participants and a completion rate of 51%. We draw on multiple sources of participant data to identify and examine features which stimulated a buzz around the MOOC and supported success in challenging contexts - many participants had little or no prior experience of online learning and a large number were based in rural areas without reliable internet access or power. Our analysis identifies features which contributed to successful participation; a focus on authentic activities in the learning design and assessment, appropriate use of technology, a three-way blended support model combining formal and informal interactions and the use of a pilot iteration of the MOOC to create local experts and champions who were then able to act as skilled facilitators in the large scale iteration of the MOOC.

FLEXIBLE AND BLENDED SKILLS TRAINING FOR TECHNICAL VOCATIONAL EDUCATION AND TRAINING SECTOR IN KENYA: PERSPECTIVES FOR ADOPTION AND ADAPTATION IN RAMOGI INSTITUTE OF ADVANCED TECHNOLOGY

Grace Titi

"Adoption" refers to the stage at which a technology is selected for use by an individual or an organization. Adaptation on the other hand results from cultural attitude change in persons or community who subsequently accepts and practices the use of technology individually and within their institutions. Adoption and adaptation are central to any implementation

process of a training programme. For any technological or process innovation to be adopted within a training programme, the role of the trainer and the learner must be considered in the acceptance stage, since these groups tend to have different levels of perception of the technology. Flexible web based training has the potential to form a core component of a skill training programme. This paper analyzed the change implementation stages of flexible and blended skills training that have been implemented in RIAT, the challenges, activities, achievements and innovative strategies associated with flexible and blended skills of a TVET institution: RIAT in Kenya. Individual interviews and desk study of various reports and publications were used for data collection. In conclusion, this paper has identified flexible and blended learning as a strategy for enhancement of the use of open educational resources in TVET institutions. The paper has recommended the implementation of flexible Web based skills training as a method of skills delivery for sustainability. It outlines lessons learnt in implementation of flexible and blended skills training as a process innovation for delivery of technical skills to learners.

MOBILE LEARNING MODEL OVER AD-HOC NETWORK

Gregory Onwodi

Few Nigerian adults have access to higher education due to difficulty in gaining admission into the limited tertiary Institutions, cost of conventional university education, or that they could not sacrifice job for education, consequently there is need to design more affordable methods or models of increasing access to education. Also, similarly being witnessed is an unprecedented explosion of mobile devices being produced, particularly mobile phones. The technology which is the commonest means of communication, could help in extending education, in formal and informal settings and to a large extent, address the problem of limited access to tertiary education in Nigeria. Document engineering and concept mapping techniques were used to integrate elements into functionally dependent aggregate that facilitated the design of the proposed mLearning model, with Microsoft Visio. Extensive Interviews with experts in the field of mLearning were conducted. Descriptive and analytical research methods were employed to analyze and compare mLearning models, in order to determine their strengths and weaknesses and also note identified gaps in evaluation of the proposed model. The strengths of the analysed mLearning models were synergised to design the proposed model. Implementation of the new model with real-time video service, over ad-hoc network, was simulated with network packet tracer and evaluated with three protocols which were Dynamic Source Routing (DSR), Ad-hoc On Demand Distance Vector and DSR protocol with extension. This research integrates mlearning concepts with existing education Satellite Infrastructure, to produce a proposed mLearning model (NEduSat). The proposed model incorporated the following interactivity components: Nigerian Communication Satellite (NIGCOMSAT-1R), remote stations with VSAT terminals, main hub station with archiving capabilities, Centralised broadcasting station, centralised content development and class scheduling and interactive and non-interactive class rooms. It also incorporated hotspots, mobile broadcasting vans and mobile devices such as Tablets, Iphones, netbooks among others. This model will enable distance learning Institutions to further increase access to education; education is extended to everybody irrespective of where he/she is because of the satellite infrastructure. It also serves as a conceptual benchmark for future studies in mlearning model and design. This model, when effectively deployed over Ad-hoc network in areas lacking infrastructure over DSR protocol with extension, will greatly reduce packet losses and ensure better video streaming in online tutorials.

A STUDY ON THE FACTORS PROPELLING THE ADOPTION OF MOBILE LEARNING AMONG STUDENTS AND INSTRUCTORS OF PUBLIC AND PRIVATE UNIVERSITIES IN PAKISTAN

Hafiz Ahmad Ashraf, Haroon Iqbal, Mehak Rehman & Sabeen Mushtaq

The present research was conducted to find the impact of the behavioral factors on the mobile learning adoption. This is an empirical study by nature which is based on positivism philosophy and the data was collected from one public and two private universities of Pakistan. The statistical population was the students and the teachers of these universities. The sample size for the students was 300 and it was 100 for instructors. The students were in different years of their education and from different departments including business administration, commerce and information technology. The data was collected using two structured questionnaires one for student respondents and other was used to record the responses of the instructors. SPSS 20 and Amos 21 were used to analyze the data. The results indicate a significant impact of independent variables on the dependent variable.

TECHNOLOGY-ENHANCED LEARNING, REFLECTIVE PRACTICES AND COLLABORATIVE LEARNING FOR A BETTER EMPLOYABILITY OF VOCATIONAL EDUCATION STUDENTS IN THE UAE

Hanadi AlSuwaidi

This paper gives an overview of my doctoral studies related to the introduction of reflective practices and collaborative learning into the emerging vocational education system of the UAE, aiming at increasing the employability of the graduates. In this emerging vocational education system, these approaches are not only new, they are also timely, building on the ubiquity of smart technologies and mobile devices. The methodology uses a mix of qualitative and quantitative approaches based on design-based experiments to study the impact of introducing reflective practices and collaborative learning. The proposed range of technology-enhanced pedagogical scenarios should contribute to equip our students with the skills required by the industry, who urges ADVETI to introduce new models of vocational education that will combine purely technical skills with higher level ones such as creative, reflective, and critical thinking, allowing to improve the role in context, and guarantee a smoother transition between studies and work, so as to build on the employability of the graduates. The paper includes a primary literature review about reflective practices and collaborative learning in this context, and previous research on new pedagogical scenarios supported by smart technologies, known as computer supported collaborative learning (CSCL). This research, one of the first of this kind in the UAE, advocates the use of the powerful new tools available today with mobile technologies to introduce reflective practices and collaborative learning and apply them to hands-on training.

INCREASING INTERACTION FOR LEARNING IN OPEN AND DISTANCE LEARNING; EXPERIENCES OF STUDENTS WITH MUELE AT MAKERERE UNIVERSITY

Harriet Nabushawo

This study reports on findings on how to increase learner interaction on the blended B.Ed programme at Makerere University using Makerere University E-Learning Environment (MUELE). MUELE is a Moodle platform developed on pedagogical principles based on constructivist and socio - constructivist approaches. As such, the platform has affordances like media, temporal and navigation which promote interaction. Using affordance analysis e-learning design methodology the tasks / activities were matched with the affordances of MUELE to foster interaction. Findings indicate that MUELE has potential to increase interaction among ODL students because they were able to interact using the discussion forum by posting their responses to the activities given and reacting constructively to posts from their peers. This enriched their understanding of the content as they freely and repeatedly sought for clarity on some posts that were not clear. The study therefore concluded that MUELE through its affordances can increase students' interactions and consequently learning outcomes.

DEVELOPMENT OF AN E-LEARNING ARCHITECTURE BASED ON NUMERICAL COMPUTING SOFTWARE FOR ELECTRICAL ENGINEERING EDUCATION IN OPEN AND DISTANCE MODE

I. A. Premaratne

In this paper an e-Learning architecture is proposed which is based on Octave software to use in Electrical Engineering education. It is always challenging to interpret physical meaning of a concept only by teaching in a classroom environment. Therefore all engineering courses recommend and include laboratory exercises in the curriculum to verify theories which are taught by printed lesson materials or lectures. These kinds of laboratory activities can be performed only in a laboratory environment hence it is difficult for students to learn at their own pace or time. Where Electrical Engineering courses offered in open and distance mode it is more difficult to find time for students to engage in laboratory activities. As an alternative, interactive eLearning materials have been introduced for open and distance mode. Although the interactive materials can provide an effective learning experience to students, it is not a straightforward option for educators as it requires more computer programming knowledge and additional time to setup the tools. This research is focused on developing an eLearning architecture which requires less computer programming knowledge than existing methods. For this method, Octave software has been used as the platform which provides opportunity of distributing both the platform and the eLearning material with an open license. The material developed on this platform is self-instructional and capable of running at user desired time and pace which would provide flexible learning. As the platform supports text, calculations and graphing on same workspace, the material could cater all learning styles. Learning outcomes are aligned constructively according to the Structure of Observed Learning Outcomes (SOLO) taxonomy. The material was tested allowing learners to attempt self-assessment questions. Results are analyzed to grade the overall achievement of learning outcomes.

THE IMPACT OF VIDEO LEARNING RESOURCES ON STUDENTS' LEARNING: A CASE OF VISUAL AND PERFORMING ARTS

I. A. K. C. Samarasinghe

In classical classroom settings face-to-face teaching and demonstration is a very common practice in dancing and in many other disciplines. Recently, Centre for the Open and Distance Learning (CODL) at the University of the Visual & Performing Arts started an external degree program on Bachelor of Performing Arts in dance. Students are taught fundamentals by face-to-face while facilitating their further learning through Learning management System (LMS) learning materials. Teaching materials of dancing practical lessons and activities are provided in combination of audio and video. However, no research has been conducted on evaluating the efficacy and students attitudes of teaching and learning of traditional dancing through e-learning in Sri Lanka and this research aims in filling this information gap. Objectives of this study were to study the effect of video learning material on student willingness to practice dance items outside the class room (effective use of notional hours), and to investigate student's perceptions on the use of video learning materials in distance learning. Data for this study was obtained from a questionnaire and data was collected from second year students in 2015. Simple random sampling method was used as the sampling technique to select students and sample size was 100. Likert scale with scores ranging from 1-5 was used to measure each questions. The data were analyzed by using SPSS. Statistical analyses were used to analyze data. The research explored student's attitudes using video learning material through technology into their learning experiences. The findings revealed that 84.5% of the students think this was effective to learn practical dancing items in distance learning mode. The high user rate suggests that students broadly accept and use video learning material as a form of instruction and as an enhancement of traditional classroom courses.

OERS TAKING SCHOOLS FROM RESOURCE POOR TO RESOURCE RICH

Ian Thomson

A rapidly growing number of schools in developing countries are introducing packages of OERs through offline solutions such as APTUS, Rachel, Internet In ABox etc. Such solutions typically deliver thousands of teaching videos, free books and text books, digital dictionaries and encyclopaedias, interactive exercises, real time student progress details etc. The schools they are delivered to typically have few educational resources, undertrained teachers and poor teaching and learning support systems. The paper will draw on several years of experience in Pacific Small Island States in implementing a range of ICT4E projects and provide insights into issues raised by this new approach of flooding schools with OERs. It will critically evaluate much of the developed world approaches to OERs for relevance, noting they come from reasonably well functioning education systems with well trained teachers, adequate resources and support systems and an ICT and information literate population. The paper will attempt to answer the question - What do we need to do to ensure maximum learning benefits come from such use of such OERs. To do this, it will examine the method and practices of deploying and accessing these OERs and identify gaps and inadequacies and make recommendations to address them

OERS FOR URDU UNIVERSITY AND OTHER LANGUAGE UNIVERSITIES

Iqbal Ahmed Khazi Rasheed

The potential for Open Educational Resources (OER) is being increasingly felt across the world especially in the field of higher education. The World OER Congress organised by the Commonwealth of Learning and UNESCO in 2012 resulted in the Paris OER Declaration which made recommendations regarding the need for advocacy, policy development, capacity-building and research in Open Educational Resources. Wherever learning is seen as a key to development, OER has a role to play there. Therefore, it is the need of the hour to research on the challenges to OER awareness, development and use. While there is extensive use of OER in the US and the UK; China, Pakistan and India have also published a huge quantity of OER in higher education adopting the open licensing and Creative Commons Attribution-ShareAlike (CC-BY-SA). The Wawasan Open University in Malaysia has a rich source of OER. Indonesia, Sri Lanka, Bangladesh are also increasingly adopting OER in higher education. The last few decades have witnessed a rapid increase in the provision of higher education in almost all parts of the world. Notwithstanding this rapid expansion, equitable access remains a challenge which can be addressed through OER. The use of digital resources is seen as one way of addressing the dual challenges of quality and equity. OER holds the promise of equitable access to knowledge. Nevertheless, the full potential of OER can be realised only when one acquires greater knowledge about OER, imbibes skills to effectively use OER and initiates a policy to support its establishment in the country's higher education. The countries like US and UK have made great inroads into OER but in India greater efforts are required to adopt the "Make in India" theme of the Government of India for OER. As a gifted land of learning, India has a vast store of knowledge to share with the world. The proposed research paper aims to discuss the ways and means to develop and implement OER for higher education at Urdu University and other language Universities in India.

ROLE OF SOCIAL MEDIA AS LEARNING PLATFORM FOR UNIVERSITY STUDENTS

Irshad Hussain

This study was conducted to a). Evaluate the role of social media as learning platform for university students, b). Examine the understanding of university students about social media used in teaching learning process and c). Identify social problems of university students in using social media. The population of the study consisted on bachelor studies students of 7th semester studying in the departments of social sciences at the Islamia University of Bahawalpur, Pakistan. The sample size comprised of 450 students taken through convenient cum purposive sampling technique(s). A questionnaire was developed for data collection. The research tool was finalized after its pilot testing. The study revealed that majority (86%) of the university students was of the view that the use of social media like face-book, twitter etc. played an important role in developing their networking and enhancing their learning. Social media acted as a learning platform and provided them opportunities of interacting with their members of virtual community throughout the world. The study concluded that social media plays a crucial role in developing networking to promoting learning of university students through interactions. The respondents also reported some social problems in using social media like isolation etc.

PRINT2SCREEN MOBILE APP: EMBEDDING MULTIMEDIA IN PRINTED ODL COURSE MATERIALS USING QR CODES

Ishan Sudeera Abeywardena

The world is rapidly moving towards a digital culture where teaching and learning is migrated to cyberspace from a conventional brick and mortar classroom. Given that eLearning and mobile learning are attractive propositions for countries with robust technological infrastructure, the global south is still struggling to mainstream digital methods of delivering education due to various technological and financial inhibitors. This has spelled a potential slow death for printed material in developing countries where the medium is predominantly used for delivering education in schools, conventional universities, vocational training institutions and open universities. However, with the rise of OER and multimedia such as YouTube videos, many of these academic institutions are becoming mindful of the richness they bring into the teaching and learning process. Given that multimedia resources cannot be directly integrated into printed material, the only available alternative is to print hyperlinks which teachers and learners can manually type into a web browser. This method becomes ridiculously ineffective as the length of the URL increases. To address this limitation with a special focus on print based ODL course materials, the Commonwealth Educational Media Centre for Asia (CEMCA), which is a regional center of the Commonwealth of Learning (COL), developed an innovative solution to seamlessly integrate multimedia into printed material using Quick Response Codes (QR codes) or 2D barcodes and an Android mobile application named "Print2Screen". This paper highlights the rationale behind Print2Screen, the development process; how the solution is implemented in a real world scenario and the benefits it will bring to the ODL community especially in rural and developing parts of the world where stable access to technology is still a costly commodity.

OPEN AND DISTANCE LEARNING: BENEFITS AND CHALLENGES OF TECHNOLOGY USAGE FOR ONLINE TEACHING AND LEARNING IN AFRICA

Ivy Rose Mathew & Jane Ebele Iloanya

Open and Distance Learning (ODL) is gaining prominence in African Universities. Universities in Africa use distance learning mode where materials are sent to learners, supplemented with a fewer contact sessions through study centers. With the advent of new technologies for teaching and learning, African Universities are also moving towards online teaching and learning. This paper presents the benefits and challenges associated with the use of technology in ODL mode in Botswana Higher Education context. Web based surveys were used to collect the data for this study. The study was carried out among the online lecturers and learners in two institutions of Higher Learning in Botswana. 9 experienced lecturers and 25 learners who had used technology for their ODL teaching and learning participated in this study. Findings indicate that, major benefits of using technology for online teaching and learning include interaction and student engagement; access to latest information; content sharing and communication. The major challenges faced are access of technology, affordability and technophobia. Emerging technologies recommended include Virtual learning platforms (Blackboard, Moodle, Edmodo, Schoology), Social networking platforms (Facebook, WhatsApp) and Content sharing software (Camtasia). The survey results will provide insightful guidelines to ODL lecturers, ODL learners and the institutions who are offering online learning modes of learning, especially in Africa.

ESL STUDENTS' PERCEPTION OF COMPUTER AND PAPER-BASED ASSESSMENT MODE IN OPEN AND DISTANCE LEARNING IN NIGERIA

Iyere Theodore. O.

This study analyses how English as Second Language (ESL) university undergraduates in Nigeria perceive and respond to the test mode effects of computer-based and paper-based tests in Open and Distance Learning institutions. The National Open University of Nigeria (NOUN) is used as a case study. The factors considered in this investigation are computer familiarity/literacy of test takers, content familiarity as well as gender competitiveness. 200 randomly selected 100 level (first year) undergraduate students undergoing the GST 101 - Use of English course were randomly assigned to either a computer-based or identical paper-based test. A post-test design with only one factor - test mode (computer-based and paper-based) was used in this study. Dependent variables included students' scores on a 100-item (50 multiple choice and 50 fill-in-the blanks) test as well as students' self-report on the open and distance learning survey. The two groups took the same set of fifty multiple choice and fifty open-ended (fill-in-the blank) questions and were given a maximum of one hour to complete the test. To measure the respondents' characteristics, a modified version of the Distance Learning Profile which consists of 12 statements that fall into these categories; Frequency of Computer use, Independence, Competitiveness, Perceived Course Quality, and Active Engagement was used. The study also used thematic/content analysis to analyse the data which subsequently showed that the computer-based test group performed better than the paper-based test group. Although content familiarity and computer literacy were related to this performance difference, gender competitiveness was not. The respondents who took the computer tests had higher and better scores than those who took the paper-based equivalent of the tests. Our submission therefore, is that the mode of test administration can have significant impact on students' performance, especially as this study has shown that majority of undergraduate students in NOUN tend to appreciate and perform better in computer - based assessment than paper-based test. This is clearly one of the impacts of the present digital age where many of these students have become familiar with various digital technologies that currently exist in different institutions in the country. Other ODL institutions in Nigeria are therefore advised to adopt the NOUN example for positive academic test output.

ICTS AND OERS ANTIGUA AND BARBUDA'S JOURNEY: AN ANALYSIS OF ICT INTEGRATION AND OER CONTENT DEVELOPMENT IN ANTIGUA AND BARBUDA

Jacqueline Peters-Richardson

The integration of Information Communication Technology (ICT) and the development of Open Educational Resources (OER) have gained prominence across the Commonwealth Nations. Educators and policy makers have realized the benefit of the ICTs and OERs to facilitate the teaching and learning of students with diverse abilities. Antigua and Barbuda is among the nations in the Commonwealth that have integrated the use of ICTs and the development of OER within the education paradigm to support and facilitate teaching and learning. The initiative began in 2013 with teachers receiving laptops and reduced internet rates. To strengthen the effort, public schools received internet connection and students

at the secondary level had the option to acquire a Samsung Tablet with free internet access from 7 am – 7 pm. In the same year, the Ministry of Education sort assistance from UNESCO and the Commonwealth of Learning in the preparation of Antigua and Barbuda ICT in Education Policy to guide the use and implementation of the technology tools and development of OER content to be incorporated by teachers. The purpose of this paper is to provide an insight into the journey by Antigua and Barbuda to integrate the use of ICT's and to develop OER to facilitate and support teaching, within the education system, chronicles both a theoretical/philosophical and socio-economic paradigm. Surveys and interviews with administrators and teachers will be conducted to record their experiences and to journalize the challenges and obstacles, benefits, successes, educators' perceptions of the process and the lessons learned. The journey by Antigua and Barbuda, over the past three years, in its quest to use ICT and develop OERs to ensure access to quality education and the inclusion of all learners, provides significant data in our attempt at implementing best practices. The findings will highlight both challenges and successes that could be beneficiary to other countries undertaking similar initiatives.

ICT TRAINING TO RURAL SCHOOLS: BRIDGING THE GAP

James S. Ssenabulya

Uganda developed its initial ICT national policy in 2003 in which the framework document recognized that the country needed to embrace the goal of lifelong education for all. The policy also addresses literacy improvement and human resource capacity-building with strategies that include integrating ICT into mainstream educational curricula as well as other literacy programmes to provide for equitable access for all students regardless of level. Efforts have been made to introduce ICT both in primary and secondary schools of Uganda so as to equip learners with the necessary skills and tools. Although the country's national ICT policy lays emphasis on providing infrastructure to schools, this has not yet been realized mainly in rural schools as the adoption level is still low. There have been hindrances ranging from low income to support the programme, limited power supply to rural schools, shortage of ICT teachers and many others. In a survey conducted by SRI International for World Links, it was reported that the lack of adequate hardware and software as well as unreliable Internet access were significant barriers to using computers in instruction. This report reflects the fact that many schools in developing countries have a student-teacher ratio as high as 80:1, and must contend with a computer lab of ten to twenty computers for the entire school - if they are lucky to have one. Irrespective of these challenges, the government has moved on to make ICT education as a compulsory subject at secondary levels of education. It is a very big challenge to many rural students and schools as they can't afford to own computers as their counterparts in urban schools which have created a digital divide among the rural and urban students. It is behind this background that the Nakaseke Rural Youth Sustainable Livelihoods Initiative is conducting an ICT training programme to these schools. This case study outlines how an ICT training programme is helping students acquire skills as a means for literacy improvement and human resource capacity-building in rural areas.

GAMIFICATION-EMBEDDED ELEARNING COURSES FOR THE LEARNER SUCCESS OF COMPETENCY BASED EDUCATION: CASE OF TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING

Janaka Jayalath & Vatcharaporn Esichaikul

To stimulate and sustain learner's motivation through effective methods is empirically proven as a predominant issue in eLearning and particularly in the context of Technical and Vocational Education and Training (TVET), which defined as the attainment of practical skills, underpinning knowledge and right working attitudes towards learning of technologies and vocational competencies. Learner success in TVET programs is heavily dependent on learner's engagement and motivation towards achieving intended competencies. Although online courses can facilitate time and place flexibility for learners, they are not designed to increase engagement and motivation of learners. In finding an effective solution to above issue, gamification support for eLearning courses quests a new paradigm of teaching and learning process which addresses on how to enhance engagement and motivation of online students to achieve high competency in education. This paper discusses how gamification (game dynamics, game mechanics, and game elements) can be embedded into online learning courses in order to enhance engagement and motivation of students. The paper further elaborates the modalities of applying game dynamics such as constraints, emotions, narrative, progression and relationships driving the game mechanics such as rewards, challenges, competition, feedback and cooperation, towards competency based education in TVET to reduce high dropout rates of online courses among demotivated learners.

THE INTEGRATION OF MULTIMEDIA FOR ONLINE AND BLENDED LEARNING AT THE UNIVERSITY OF THE SOUTH PACIFIC

Javed Yusuf, Deepak Prasad & Dhiraj Bhartu

The University of the South Pacific (USP) a regional university, established in 1968, serves twelve independent island nations of the South, Central and North Pacific. The University is moving towards providing more of its programmes and courses through flexible delivery using online and blended modes. As a result there has been a gradual increase in the integration of multimedia components such as audio, video, graphics, animations, and simulations as part of courseware or course packages. This increase in demand is anticipated to have further growth. This paper focuses on the current status on the different types of multimedia currently integrated in USP coursewares, and discusses the areas of multimedia that is anticipated to grow over the next few years at USP.

TECHNOLOGY ENABLED LEARNING: PERSPECTIVE OF UNIVERSITY STUDENTS

Jayashree Shinde

Integration of technology in teaching-learning practices of any University is a systematic transformational process. Establishing a policy is the first step of this process. This will be followed by its systematic implementation. SNDT Women's University, Mumbai, India has

successfully prepared “technology-enabled learning policy” by following a bottom-up approach. Baseline study of University stakeholders’ views and perception was planned at the initial stage. Perspectives of students were the crucial aspect in this study. Student sample was selected using stratified random technique. Students represented all 15 faculties from three campuses which house 39 Post Graduate departments and 13 institutions including undergraduate colleges. The survey revealed students’ perspective about technology integration in learning. Almost all students show preference for technology enabled learning. They demand wi-fi access on the campus. As 86% students have smart phones in their hand, they prefer it as a learning device. They suggest use of online learning platform, access to web-based learning resources and social media as learning environment. Students perceive long lectures as boring and mentally stressful. Recorded videos, synchronous online interactions with guest experts are felt as essential. Open access to learning material, international journals, ebooks, etc. is demanded. Students feel that technology enabled learning helps them get ready as global citizens. University students strongly demand BYOD facility across campuses to access worldwide quality education resources. The study of students’ perspectives provides insight for planning ICT infrastructure and for designing technology enabled learning activities across the disciplines.

WHERE IS YOUR MOBILE PHONE- A MULTIPURPOSE TOOL FOR DEVELOPMENT

Jedidiah Koomson

The proliferation of mobile phones in rural Africa, where still access to internet connectivity is limited has affected enhanced tele-medicine and other modification to health care delivery had been discussed for long. In order to explore the reliability of creating community participation and ownership of health delivery through the use of mobile phones, we in the Assin South district of Ghana had taken an action, and this paper is enacting its outcomes. In 2015, the District Health Directorate and the District Assembly organized a training workshop for users of mobile phone who have interest in health events reporting and data utilization to facilitate disease surveillance and health promotion throughout the district covering rumor and health events reporting, sending reminders for Ante and Post Natal Clinic attendance, and development and use of codes for specified item for incidental performances. Monthly community durbars were organized at the sub-district levels with community members and health staff to reflect and analyze the achievements, challenges and gains made on the work they have done through the mobile phone reporting. Spaces were created, given people, voices to express their hopes and suggestions to improve health care delivery. The communities provided the volunteers free phone credits to motivate and encourage them. By the end of the year 2015, 367 pregnant women whose lives were threatened by gynecological disorders and prolonged labor were timely managed at referral hospitals due to fast reporting through the use of the mobile phones. 99% of the 4270 antenatal registrants, 84% of the postnatal mothers attended the clinics during the scheduled period. The use mobile learning in health care delivery can save and improve life in limited resourced settings and has the potential in supporting the attainment of the sustainable development goals indeed.

MERLOT: A CASE STUDY OF SUSTAINABILITY IN OPEN EDUCATIONAL RESOURCES (OER)

John Okewole & Irene Knokh

MERLOT (Multimedia Educational Resources for Learning and Online Teaching), is a curated collection of free and open online teaching, learning, and faculty development services. The collections are contributed and used by an international education community. "This paper discusses the sustainability of the project since its inception in 1997. Merlot is a case study of a pathway for OER projects to become viable through a focused leadership and vibrant community. Current Merlot.org used data shows consistent increase over the years. MERLOT's platform is highly robust and responsive to new technological practices. Merlot is unique because it is an OER content and service platform. The goals are to keep contents qualitative, effective, and easy to use. Suggestions are provided for OER projects and individuals in maximizing time with MERLOT.

TECHNOLOGY INDUCED INNOVATION IN TEACHING AND LEARNING SYSTEM OF BANGLADESH OPEN UNIVERSITY: A SHIFT OF PARADIGM

Khondoker Mokaddem Hossain

This paper examines how Bangladesh Open University (BOU) – the only open and distance learning provider in Bangladesh has shifted its ODL system by using technology oriented innovative programmes. The study assesses how the ICT oriented learning management system helping BOU to change the paradigm in the context of teaching and learning through ICT. In analyzing the technology oriented educational system, the study examines the role of interactive virtual system in introducing and expediting the effective teaching and learning of ODL. The study indicates whether the self-learning materials (SLMs), BOU Tube, BOU Facebook, Twitter, and Video Conferencing Facilities etc. provide easy access and affordability to the teaching and learning of ODL. The paper highlights how BOU has introduced innovative technologies in its different academic programmes. It further analyzes the implications of recently introduced Enterprise Resource Planning through comprehensive university management software. Moreover, it assess the impacts of Commonwealth of Learning (COL) supported certain academic programmes with the introduction of certain innovative technologies. The study assess the effects of COL introduced self-assessment of the quality of BOU programmes under the COL-RIM project which is apparently based on dynamics technology oriented academic exercise. The study finally tries to recommend specific policy implications whether BOU management has been very effective in sustaining of all academic programmes, including the teachers and learners through ICT. The study follows the combination of both quantitative and qualitative methods. The quantitative method includes the reasonable sample respondents from various categories of representatives like teachers, students, field administration, BOU management, and relevant stakeholders. On the other hand, the qualitative method includes case study, focus group discussion, KII etc.

REACH, EFFECTIVENESS AND LISTENERSHIP OF COMMUNITY RADIO-A STUDY BY NATIONAL INSTITUTE OF OPEN SCHOOLING (NIOS)

Manoj Thakur

Mass communication has been playing a great role in education, and particularly in open and distance education. Besides, many means of mass communication, community radio has emerged as one of the best means to educate community. National Institute of Open Schooling (NIOS), world's largest open schooling recently launched its community radio, first of its own kind, by any open and distance institution in India with an aim to educate not only its learners but also people of nearby community who are not aware of many social and educational aspects. This research was done for NIOS to get feedback from community, to promote its own community radio and also to find reach, effectiveness and listenership of existing nearby community radio station, so that NIOS may strengthen its future course. Purposive stratified sampling selecting 500 respondents were chosen for the survey. Observation and survey method within the radius of 5-7 kilometers from NIOS headquarters were used for data collection. Findings of the research showed that community radio was not so famous in the region as compared to other famous existing FM channels. Low awareness, lack of entertainment, no publicity, no participation from community has resulted in less audience. Though, findings showed respondents were interested and enthusiast to participate in the programmes of community radio. They wanted to share their feelings and knowledge with others and also suggested about format and styles of programmes which can give maximum benefit to the community. This study was an attempt to know advantage and short comings of community radio and its utility in open and distance education. No, doubt, community radio has become best medium to deal with local problems, it also gives a voice to the voiceless, enabling people to speak and make their opinions, grievances and ideas known to those who have the power to make decision.

Keywords: Reach; Effectiveness; Listenership and Community Radio

BUILDING A LEARNER FRIENDLY EDUCATIONAL PLATFORM: TOWARD A CULTURALLY SENSITIVE LEARNING MODEL

Martin A N Khamala

Despite the many years through which e-learning systems have been used in Africa, the uptake of digital content in schools still lags far behind the expectations set by the continent's millennial goals. Not much has been done, to look at user specific cultural aspects of digital content access within the education stratosphere in Africa. For the e-learning technology to take root in African schools, requires a nuanced and targeted approach. This research paper proposes a prototype as a probable solution based on the presumption that cultural differences between the developers and consumers of such systems are at the heart of the problem. In this paper, we look at building a digital content platform prototype for accessing digital content in a manner that is uniquely adapted to learners' in basic education. The research question focus is on building a platform that accounts for the differences in the way that African learners access content depending their cultural persuasion. The system architecture is built around a Model - View - Presenter (MVP) pattern which leverages the benefits of encapsulating the system logic within the Model and manages content access

behaviours, within the Presenter. The client View is generated dynamically in runtime as a render of the Presenter. The benefits of this architecture are primarily that matters relating to user navigation and selection are validated by the Presenter in abstraction from the View and Model. This allows for independent unit tests to be performed more easily along the lines of how individual learners would interact with content. The efficiencies gained in working this way should translate to a user-focused, purposive product. The system is load tested for robustness and installation tested for compatibility on different devices. The educational assumptions are validated by running benchmark tests through seven numeracy and literacy activities along the guidelines of three cultural learning strategies. These findings informed the first build, the result of which is a more personalized, adaptive approach to content access that takes into consideration interface modalities, user specific learning strategies and learner driven interactions.

THE LINES THAT DIVIDE: A STUDY TO EXPLORE THE EXISTENCE AND USE OF TECHNOLOGY AND INNOVATIVE EDUCATIONAL APPROACHES TO FOSTER EDUCATIONAL PROGRESSION AMONG INDIGENOUS GROUPS

Maxine Mckay

It is often professed that “the highest performing education systems are those that combine equity with quality, access, innovation and technology” (OECD, pg. 5, 2012). Consequently, if education is to create opportunities for anyone who seeks scholastic self-actualization, systems must be set in place to ensure access. To add there are many countries that has taken the lead to make education more accessible via the use of innovative and technological approaches. Furthermore, some of the more ingenious approaches include, Open Learning Platforms, the use of tablets, MiPads, iPods, Floating Schools, Libraries on Wheels and Mobile Buses to name a few. Needless to say despite the evident manifestation of resourceful systems that have been used to make education more innovative and technological accessible, many groups continue to be left behind. The latter is especially evident in countries where indigenous groups are not given equal access to education. One study indicated that “access at all levels, and in all regions of the world, indigenous people tend to have lower levels of literacy, enjoy fewer years at school and are more likely to drop out of school as compared to non indigenous groups” (United Nations, pg. 19, 2009). The latter thus provides evidence that indigenous populations are at risk, thus innovative approaches and technology must be utilized to aid indigenous group in scholastic contentment. This study therefore seeks to explore the extent to which technological and innovative educational approaches are utilized to afford indigenous groups fair educational opportunities. The study will utilize archival data (supports the literature), observations, and face to face and telephone interviews to gather the needed data to support the study. Finally, recommendations will be given, so that policy makers can be better informed about the value of non-traditional forms of education, namely innovative education and the use of technology.

CAN MOBILE LEARNING UPGRADE THE EDUCATIONAL STATUS OF BANGLADESH: CHALLENGES AND OPPORTUNITIES?

Md. Anwarul Islam & Sharker Md. Numan

Education is the fundamental right of Bangladesh. Skilled and educated manpower have the scope to contribute for national development. As vast improvements in educational sectors, such as enrolment, significant challenges remain in developing countries, particularly in rural and remote regions. Mobile technology such as smart device, mobile apps, smart card etc. facilitates the flow of information and knowledge. Bangladesh has ranked at 9th position by using mobile phone in the world (Wikipedia, 2016) but in the education sector the use of mobile application is far behind. To ensure the quality teaching and learning methods BOU has planned to use mobile and internet technology for the learners. A Cross-sectional study was designed to collect data from October to December 2015 using a semi-structured questionnaire from the randomly selected study centers along with its learners and tutors separately. The sample size of this study was 615. The questionnaire was divided into 3 sections. Section 1 was respondent's biographical profile; section 2 regarding the technology uses by respondents, section 3 having respondents' knowledge, attitude and practices of mobile applications. A pilot test using a sample of 8 academic staff and 12 learners was conducted to confirm the clarity of the items before the instrument was administered to the sample group. Recently BOU has developed mobile set compatible memory cards containing e-books and audio-visual materials for the learners. BOU have uploaded near about 400 textbooks in the form of e-books of almost all academic programs. BOU has already developed and installed multiple mobile apps and educational webpage for the learners as learning tools. It would be a great opportunity for the learners to access their study material and any other queries regarding their learning process by using the student portal from their mobile internet. This is cost-effective and time saving approaches to enhance the teaching and learning process for huge number of learners. Despite of these, Bangladesh has faced uninterrupted and low bandwidth internet connectivity throughout the country. This paper focus on how the learners can use of different learning tools regarding the learning process by using mobile technology in the context of Bangladesh.

ARTICULATION OF GROUP DYNAMICS OF UNDERGRADUATE STUDENTS IN SOCIAL MEDIA

Md. Kabirul Islam, Yousuf Mahbubul Islam, Mohamed Emran Hossain & Mohammed Shamsul Hoque

The main aim of this study is to investigate the students' group dynamics during their online activities within the framework of Zone of Proximal Development (ZPD) theory of Vygotsky and the potential of more capable peers for knowledge construction in an undergraduate course. A social media environment was used as a support tool in a blended approach. The students were given a task set on computer programming in the social media and asked to support each other for solving problems with no teacher intervention. Pre and post tests were conducted and t-test of the scores (out of 15 marks) obtained by the students was done to discern any improvement of learning as a result of students' engagement in problem solving in the social media. The results of the t-test indicated an improvement of acquisition of knowledge in the topic of basic programming. The conversation of the students in the

form of textual messages showed that the students who experienced a problem in order to solve the set task were in the ZPD and ultimately did it successfully with a little assistance and scaffolding from a more capable peer. In fact, the members of the peer groups provided support to bridge the gap between the existing skills and abilities of programming and their intended goal that is, completing the tasks given by the course teacher. Additionally, the students felt that peer interaction improved their understanding of the computer programming and problem solving competency.

LEARNERS' ATTITUDES ON WEBTV FOR ENHANCING ACADEMIC PERFORMANCE AT THE BANGLADESH OPEN UNIVERSITY

Md. Mizanoor Rahman & Santosh Panda

Bangladesh Open University (BOU) introduces webTV - a video-based interactive educational web portal - along with the other media such as print, radio-TV broadcasts, and tutorials. webTV can result in significant gains in basic and higher order learning of the BOU students as most of them uses internet in the smartphones. The objective of the webTV was to provide learners with access to more learning information. Introduction of technology is not the option for BOU; it is obligatory by the BOU Act 1992. It introduces technology and subsequently, it assessed impact and customizes, as required. Therefore, this study is very important for the BOU. This study employs two data collection methods: focus group interviews and survey through structure questionnaire. A survey questionnaire instrument was administered with 212 learners to capture their perceptions on webTV. This sample is quite low in relation to the number of enrolment. One thing, here it is important to mention that Bangladesh is uncultured country and most of the leaners come from more or less similar soci-economic background. In this way, it represents the population. Participants of this study were interviewed and the interview was recorded for the purpose of the analysis. In this study, the participants are BOU students who were enrolled in the BOU programmes and attended in the Regional Centres (RCs) for seeking information. Findings of the study indicate the challenges that the participants faced are expensive and technical difficulties in mobile. Data shows statistically significant increase in using webTV when students are informed. Impact of webTV on cognitive development is tremendous to BOU learners on their courses of studies.

LEARNERS' PERCEPTIONS ON CURRICULUM-LINKED VIDEOS ON ENGLISH FOR CREATING CONSTRUCTIVIST AND BLENDED LEARNING ENVIRONMENT

Md. Mizanoor Rahman, Prithvi Shrestha, Akm Iftekhar Khalid & Kazi Sharmin Pamela

The infusion of Information Communication Technology (ICT) into education has created a major impact on the instruction of English language (EL) around the globe through changing classroom and distance education settings. Accordingly, Bangladesh Open University (BOU) and The Open University, UK jointly through a project work developed curriculum-linked videos (CLVs) on English for Bangladeshi learners. These videos are being used by the formal schools to create 'constructivist classroom' and BOU Open School (BOU-OS) to create

'constructivist tutorial session' to overcome the difficulties in achieving four language basics – reading, writing, listening and speaking. In addition, the 10-minute-videos are distributed amongst learners through SD cards and/or available in the web for home study and this has created a blended approach. A survey questionnaire instrument was administered with 119 learners after a certain period to capture their perceptions. Current research also conducted focus group discussion (FGDs) for qualitative data. The students showed positive attitudes towards the videos with respect to their learning motivation and understanding, skills and their teamwork abilities. By incorporating CLVs into a constructivist learning environment, students learned to achieve EL skills, as well as to experience critical-thinking, creative, presentation and communication skills; enhanced motivation and understanding various levels of the EL domain. Our findings provide strong support and encouragement for English teachers in Bangladeshi formal schools and BOU-OS to incorporate ICT and constructivist learning in classrooms/tutorials and for the enhancement of EL teaching.

SELF-INNOVATION IN DESIGNING AND DELIVERING E-LEARNING COURSES USING THE MOODLE PLATFORM

Michael Nkwenti Ndongfack & Thomas Hilaire Ella Ondoua

As technology innovates practices in various sectors of societal life, higher education lecturers cannot afford to be left behind. Many research findings are increasingly demonstrating that teaching and learning in conventional classrooms will highly be impacted by online learning. These new perspectives pose serious challenges to higher education lecturers, who must innovate their conventional teaching practices or face unprecedented setbacks. In anticipation to this imminent threat, this paper demonstrates how lecturers can start innovating their practices by using the Moodle platform to develop and deliver online courses. The study employs the quantitative research approach to collect data on Technology Acceptance Model constructs to measure students' acceptance and use of the Moodle platform in a blended course in the University of Yaounde I, Cameroon. The study targeted $n = 125$ students enrolled in one of the courses in the Master of Curriculum Development and Evaluation programme in the Department of Curriculum Development and Evaluation, Faculty of Education, the University of Yaounde I. The experiment lasted for one semester (14 weeks), running from 15 October 2015 to January 2016. The results of the study revealed that user support, perceived ease of use, and perceived usefulness are three important determinants of attitude toward using the Moodle platform. Perceived ease of use is the most significant determinant that directly influences attitude. Also, students' behavioural intention to use the Moodle platform was as a result of their perceptions of the support system available, perceptions about how easy it is to use the system, and perceptions about how useful the system will help them in their learning process. It is therefore recommended that the Faculty of Education and other faculties in the University of Yaounde I train lecturers to design and put their courses online to enhance students' learning outcomes and contribute in widening access to higher education.

AN EXPLORATORY CASE STUDY: THE SUDDEN INTRODUCTION OF INTERNET PROTOCOL TELEVISION (IPTV) IN ANODL ACCOUNTING PROGRAM. THE UNIVERSITY OF PAPUA NEW GUINEA OPEN COLLEGE (UPNG OC) EXPERIENCE

Michael Pepen

The sudden introduction of IPTV provided the opportunity to cautiously appraise the role of technology to support the predominantly print form of distributed learning within the UPNG OC network. Towards appraising and evaluating the IPTV this research question was posed; does the IPTV Live Broad Cast have an effect on the Accounting 2 DE learners' academic performances? To answer this question the quasi - experimental design was employed and the t - test was used to compare the aggregate academic grade scores of the ODL students using print and those using print and supported by IPTV Live Broad Cast. An eclectic stance is taken in discussing the use of IPTV and the results obtained, and conclusions were made with reference to Laurillard's Conversational Framework (1993) and the Equivalency Theory (Simonson. 2000). And finally recommendations for policy makers and academics are offered with respect to the findings of this study with the hope that relevant actions are taken to improve and establish an economically prudent and appropriate strategy for effective use of technology to support distance learning courses among a network of campus and centre sites in Papua New Guinea.

USE OF TABLET COMPUTERS TO IMPROVE ACCESS TO EDUCATION

Mohamed Ally, Zarmina Nasir, Anwar Abdulbaki & Ricky Cheng

A research project was carried out in using mobile learning to increase access to education. This project is contributing to the achievement of Goal 4 of the Sustainable Development Goals (SDGs) "inclusive and equitable quality education and promote lifelong learning opportunities for all". The mobile learning project involved the use of mobile technology to deliver learning materials to students to provide flexibility of access. Students used tablet computers to access electronic learning materials from the Aptus local server without having to connect to the internet. The Aptus system is portable and was designed by the Commonwealth of Learning to allow learners to connect to digital learning platforms and access course materials without the need for internet access. The project was implemented in a school in Pakistan. A total of 74 Grades 8, 9, and 10 students were involved in this project. The research revealed positive impact on students and on learning as a result of their participation in the mobile learning project. The results from the research study indicated that students are better able to use the mobile technology for learning. Both students and parents also reflected that the project increased the students' knowledge on the use of tablet for learning. Parents shared that the mobile learning project increased their children interest in study. This was also acknowledged by teachers that the students were taking more interest in classroom learning and concentrated on their tablets during study. Students were given content pre-test and post-test. The post-test scores were significantly higher than the pre-test scores, indicating the use of the tablets for learning improved students' performance.

A STUDY ON THE ADOPTION AND INTEGRATION OF OER MATERIALS IN SELF-INSTRUCTIONAL COURSE DEVELOPMENT

Mohan Menon, Vasant Bhat, Rama Mathew & Phalachanadra Bhandigadi

Creation of large number of Open Educational Resources (OERs) and adoption and integration of such resources for classroom teaching and creation of new learning materials are expected to impact on creation of quality learning materials with relatively low cost. There is wide agreement that OER materials can be harnessed to produce educational materials within a given instructional context. However in spite of a few studies on reusability of open educational content in different contexts, there is insufficient information and understanding about the processes involved in OER integration and contextualisation. This paper reports part of the findings of Sub-project-7 of a meta-project viz. Research on Open Educational Resources for Development (ROER4D) that investigates into the operational processes involved in the development of self-learning materials by integrating available OER resources in developing a 5- credit (200 hours study) course on 'Research Methodology in Education' at post-graduate level. The operational processes related to the web search and use of OER reported in the project are findability of relevant OER materials, levels of reusability by course writers and cost-time efficiency achieved by the use of OER. These qualitative data on these variables were captured in the form of log records, written reflections, individual and focus group discussions, semi-structured and unstructured interviews, etc. Findings of the study show that there is adequate availability of relevant OER resources of varied types and formats for the given course. It is also found that there are a number of factors including mainly subject content expertise, subject specific pedagogy, OER awareness, OER reuse skills and understanding of local learning environment which positively influence the effective reuse and integration OER and the ways constituting the integration process are adoption, remixing, adaptation, re-creation and new creation.

A HYBRID E-LEARNING MODEL IN A LOCALIZED ENVIRONMENT

Moiz Uddin Ahmed & Shahid Hussain

The rapid developments in Information and Communication Technology (ICT) have transformed open and distance learning into e-learning or online learning. The increasing pace of technology-based activities has created a competitive environment and challenges for the institutions providing distance learning programs. This paper presents a hybrid e-learning model keeping in view the international standards adopted in a localized environmental the Allama Iqbal Open University (AIOU), Islamabad, Pakistan. The model is composed of delivery of course tutorials, student teacher interaction and assessment criteria. The model is implemented on a selected course of computer sciences offered at AIOU with sizeable proportion of females and outreach to rural areas of the country. The examination results show that the hybrid e-learning mode has improved the performance of the students as compared to other courses of the same level. The paper also discusses the results of a feedback survey conducted from the enrolled students. The survey results reveal satisfaction and strong preferences of e-learning by the local learners.

USING TECHNOLOGIES AND OER TO ENHANCE EFFICIENCY AND EFFECTIVENESS OF HIGHER EDUCATION IN BANGLADESH: OPPORTUNITIES AND CHALLENGES

Mostafa Azad Kamal

The existing capacity of the on-campus institutions is not only insufficient to meet the growing demand for human resources, but also lagging behind in terms of engaging the learners and providing access to educational resources. Adopting technologies meaningfully can have a scalable impact on education in terms of output and quality of education. This paper discusses the benefits of the recently adapted technologies and OERs in some courses of BBA and MBA programs of Bangladesh Open University in terms of better learner engagement, access and learning management. The paper also highlights the challenges of technology integration into the courses and recommends remedial measures to address the challenges.

USING EXTRINSIC AND INTRINSIC MOTIVATION FACTORS TO ENCOURAGE STUDENT DISCUSSIONS IN ONLINE CLASSROOMS INTEGRATING FACEBOOK: LEARNER PERSPECTIVE

Nadeera Meedin & Isuru Premaratne

Providing a platform for students to discuss online with peers and teachers is vital in distance learning. Initiating an online forum and integrating social media itself is not going to motivate students in active participation. This research examines how different types of motivators can be used to improve the active participation of students. Existing researches have shown that enjoyment, social presence and learning as main intrinsic motivators while awards, creativity and the reputation as main extrinsic motivators. Most of these motivators are already implemented in social media such as Facebook, Twitter, LinkedIn and Instagram which are currently entertaining the highest number of users. In this research Facebook was integrated into two courses from Electrical and Computer Engineering which are delivered in distance mode. For the selected samples facebook groups were created and the students of the course were added as participants while assigning facilitator and moderator roles to teachers. Students who have already completed the course were also added. This research measures the active participation of students in terms of number of comments, replies on comments, number of participants seen a post, number of reactions. These measurements will be taken by posting provoking questions as posts. Here it will be used Smileys and stickers as enjoyment factors, sharing photos taken in the course related activities as social presence factors and allowing students to brainstorm based on what was taught by the teacher as learning factors. Award, points for students who are active the most were considered as rewards for students, posting tasks allowing students to think creatively as creativity factor, allowing students to solve problems will be given as Reputation factors. By conducting this research we believe it is possible to identify the motivational factors to include in learning activities which would increase active participation of students in online discussions.

MOBILE LEARNING -CYBERLAW COURSE, THE APPLICATION DEVELOPMENT AND STUDENTS PERCEPTIONS

Najwa Hayaati Mohd Alwi, Habibah Ismail & Fatin Munirah Ahmad

Mobile learning concept is growing rapidly and has brought much significant convenience to the user as it is using ubiquitous devices which follow the latest trend. But in some cases, the mobile learning application is built without serious consideration in security aspect especially related to integrity and privacy of data. This paper discussed the development of online content using the mobile application concept and the acceptance of students on this new way for teaching and learning. MyCyberLaw is a mobile learning application for learning Cyber Law course. MyCyberLaw is developed to help lecturers to deliver learning module to the students. It also allows students to easily access the learning content anywhere and anytime. There are sections for lecturer sharing notes, assignments, send messages and upload student's grade. Student can view all content that have been shared by lecturer. This application is open to be downloaded and used by students. Majority of them appreciated this learning tool and would like to see more courses offered in mobile application version. MyCyberLaw is an innovation for secured mobile learning application, as well set as example of Internet of things in Education sectors.

HOLISTIC SELF INSTRUCTIONAL LEARNING MODULE TEMPLATE

Najwa Hayaati Mohd Alwi, Norasikin Fabil, Nurul Fathihin Mohd Noor, Rozhan Mohammed Idrus & Mu'azz Sahari

Discussion on producing holistic or balanced graduates has been significance worldwide. This however has to be translated among others, in the teaching and learning content material. The academician has been encouraged to develop a suitable teaching and learning content that integrate the revealed and acquired knowledge. One of the effective methods in preparing e-content is by developing a Self-Instructional Learning Module (SILM), which accentuates student-centered learning. This paper will explain the students centered learning approach, concept and component of SILM, and the advantages of the use of SILM in the teaching and learning process. This paper also will provide the result of perception of lecturer towards SILM. Using ADDIE model for methodology of development, this paper highlights how holistic concept can be injected in the SILM based on four levels of integration: Ayatization, Comparative, Adaptation and Integration using the Gagne 9 events of instruction. A template for Holistic Self Instructional Learning Module is designed to assist the academic in applying the concept discussed.

CROWDSOURCING MOOC INTERACTIONS: USING A SOCIAL MEDIA SITE CMOOC TO ENGAGE STUDENTS IN UNIVERSITY COURSE ACTIVITIES

Nathaniel Ostashewski, Jennifer Howell & Jon Dron

This paper reports on a study of the utilization of a connectivist-style Massive Open Course, or cMOOC, to engage students in online activities that were part of a first-year School of Education course. A customized ELGG social software platform, implemented as the Curtin

Learning Commons, was developed to deliver a six-week cMOOC. The cMOOC, titled Participating in the Digital Age (PDA), engaged students in activities that used a variety of social media and crowdsourcing techniques to provide educational content and experiences. The goals of this MOOC were to provide conceptual understandings and opportunities to participate in tasks exemplifying the topic. The study presents evidence that blending MOOCs with classroom-based or online learning does provide higher education learners with personalized active learning opportunities. Further research on providing scaffolded support to enable learners to capitalize on additional aspects of networked learning in cMOOCs would advance this use.

SECURITY THREATS AND CHALLENGES IN MASSIVE OPEN ONLINE COURSES (MOOCs)

Naveen Kumar

The effect of Internet and communication technologies on our lives, culture, and society keeps on increasing. One of the major technological leap in open and distance learning is MOOC (Massive Open Online Course). MOOC has emerged as a platform for learners around the world to have access to quality education, as each technology brings its own challenges and security risks, appropriate measures and solutions for these. The idea of MOOC is widely popular in the domain of open and distance education system. MOOC has become a significant social dividend, considering its vibrant scope, especially in the developing countries. Many analysis have shown MOOC as not only a new phenomenon but as an emerging revolution in the fields of education in general and open and distance learning in particular. However, the path to democratize education is placed with many challenges and road blocks. The delivery of MOOC raises many questions to information security which calls for serious academic attention. These challenges range from user authentication, user authorization, data protection and privacy, confidentiality, non-repudiation, attendance tracking and electronic copyright protection. These security questions cannot be overlooked or ignored. This paper will explore in detail, the analytical perspective of all the major security threats with respect to MOOC, with a view to suggest remedial mechanisms. This paper is an outcome of the research undertaken on the major MOOC providers such as edX, Coursera, Udacity and Khan Academy. The possible security threats were analyzed at different stages of course starting from course registration, access of modules, communications between teachers and learners, assessments, examinations and certifications. Further, possible solutions of these threats are discussed in our study. It is noticed that the security issues and challenges are inconsistent and incongruent among different MOOC providers. The need for standardization and designing a global policy framework for security is essential for MOOC to act as an effective educational delivery system. Also, various tools and technological solutions should be integrated and implemented to ensure security challenges of MOOC.

USING ANALYTICS TO IMPROVE LEARNER-CENTERED APPLICATION DESIGN

Nazir Ahmed Sangi, Kamran Mir & Muhammad Ali Tahir

Data analytics is one of the content analysis techniques which are being used in many disciplines to make informed decisions by understanding the existing data. In education, analytics is very popular term which is used to measure and analyze the learner's data to

make appropriate improvements in learning and teaching designs. In this study, an online support system is being analyzed with the help of analytics in order to recommend key parameters for learner-centered application design. One year data from April 2015 to April 2016 is being acquired and examined based on learner's parameter. In particular design attributes have been proposed for future applications to make them learner-centered. The basic yet effective parameters such as geographic location, device, operating system, browser and system language are analyzed which provides an insight into users' preferences. This knowledge is used to build advanced personalized learner-centered applications.

EXPLORING ADULT LEARNERS MOTIVATION TO PARTICIPATE IN ONLINE TUTORIAL THROUGH I-LEARN PLATFORM IN NATIONAL OPEN UNIVERSITY OF NIGERIA

Nnenna Nancy Chukwuma & John M. Patrick

The question of participation in e-learning has been a daunting one with most learners having low morale because of poor motivation resulting in high level of attrition. The National Open University of Nigeria in order to reach out to the learners where ever they are, and to be technologically compliant in line with the best practice(s) in ODL system, established the ilearn e-learning portal. The learners' participation in the ilearn online tutorial has been dramatically low. It is against this backdrop that this paper examines adult learners' motivation to participate in Online Tutorial through iLearn Platform in National Open University of Nigeria. The study was guided by three research questions and three hypotheses. The paper also examined the level of variation in the factors motivating or inhibiting participation across gender. The study was carried out in Port Harcourt study centre. The study adopted descriptive survey research design. The population of the study was 1229 postgraduate students of NOUN out of which 301 students were sampled using the yaro yermen sampling techniques. A 29 items questionnaire, Focus Group Discussion and key Personality Interview were used for gathering data. 301 copies of the questionnaire were distributed to the respondents out of which 297 were retrieved representing 98 percent. The research questions were analyzed using mean while the hypotheses were tested using t-test statistical tools. The study revealed that the adult learners were intrinsically motivated by instructional factors, that the learners are extrinsically motivated by the artistic design of the ilearn e-learning portal, however extrinsic social factor motivating the learners is very low. The study also reveals that there is variation in the intrinsic instructional factors and extrinsic social factors motivating the learners across gender with the male adult learners been more motivated than their female counters. However, no variation was found in the artistic motivating factors. From the findings, it was concluded that there is low motivation to use the ilearn following the several inhibiting factors, which are de-motivating. Based on the finding some of the recommendations were the provision of a robust learner support serve and inclusion of an introductory course in ICT and Application of ICT in ODL systems.

THE ROLE OF THE COMMONWEALTH EDUCATION HUB IN SUSTAINABLE DEVELOPMENT

Paul West

The Commonwealth Education Hub portal is a project that learns and adjusts as it progresses. The project allows the testing of knowledge-sharing approaches. The Education Hub offers four key services:

1. **Collect** – access to a curated collection of digital knowledge resources that includes commonwealth policy tools and frameworks, country policies and good practices, as well as discussion summaries produced by the community of practice or senior officials and practitioners. The Commonwealth Education Guide lists courses offered by institutions in the small states of the commonwealth. Information on bursaries and scholarships is available online. Data aggregation mechanisms provide access to free courses and tens of thousands of educational resources.
2. **Connect** – more than 700 senior education policy makers, planners and professionals from across 53 commonwealth countries are connected through the community of practice mail group. Knowledge resource pages are maintained on topical areas, which include policy briefs and submissions by members.
3. **Consult** – Commonwealth members can ask policy questions, request resources, engage in global advocacy with the hub staff and engage the support of an international pool of experts.
4. **Collaborate** – support collaboration between networks and partners for research, resources and innovation. Partner pages assist in directing researchers and users to commonwealth sites, while specialised groups are created for ministers and senior officials and supported via the Education Hub.

This paper describes the origins and progress of the pilot project, and suggests options for the next phase of the project.

MOBI-MOOCs: A SIMPLE AND EFFECTIVE WAY TO DELIVER EDUCATIONAL CONTENT

Prabhakar Tadinada, Sharwan Shukla & Gaurav Shukla

Mobile phones have become affordable and ubiquitous. However, in most parts of the developing world, the data connections on these are either not present, or are of very low bandwidth and erratic and expensive for a large segment of the population. We suggest that we use voice connections to deliver educational content in such scenarios – we call this a Mobi-MOOC. Essentially, in Mobi-MOOCs, when a user calls up a number (can be toll free), an Interactive Voice Response System takes over and guides the user through learning objects. The system uses Speech Recognition to help the user interact with the system. We developed courses on Basic Crop Production Practices for Farmers and Gardeners and found them to be very effective. In this paper, we present the concept of Mobi-MOOC, the technologies and processes involved, and also the results of our Mobi-MOOCs. Not

every subject can be taught in this format. In this paper, we will discuss the pedagogical issues related to designing courses for a Mobi-MOOC, like the duration of a lecture, and navigational issues etc.

VIRTUAL REALITY AND 3D TOURS AS A PEDAGOGICAL SUPPORT TO IMPROVE STUDENTS EXPERIENCES AT THE UNIVERSITY

Rajabalee Yousra Banoor, Rajputh Ravi & Sungkur Roopesh

This paper discusses the experiences of freshers and online learners who have embarked on a tertiary online course at the University of Mauritius. Online learning which is emerging as a promising market for the education industry is growing at a rapid pace in Mauritius, especially because it offers learners the opportunity in becoming highly independent and autonomous in their learning while at the same time promotes the earn while you learn concept. However, the difficulty lies in the fact that online learners are often off-campus and are not accustomed with the campus infrastructures and key areas for queries and information offices. They visit the campus as and when any ad-hoc face-to-face session has been convened or for administrative purposes like payments or module registration. Freshers who are also new to the university environment tend to feel lost or misguided through inaccurate information given to them during their one-day induction session. Similarly, sometimes in their effort to locate either any particular office for queries or even to obtain "just-in-time" information at any office, learners simply get confused. The development of a 3D model of the university will help learners to visualise and experience a sense of real-world environment and precisely locate themselves in order to know if they have landed at the right place. Virtual reality and the 3D tour will help learners to navigate and immerse in the university environment for better exploration. The rationale behind this development is to support online learners for a good integration in their higher studies especially since the difficulty to adjust with such social integration to the institution, tends to give rise to learner anxiety and frustration which directly impact on their higher education. McCraty (2007) and McCratyet al. (2000) have demonstrated that learners' anxiety and confused state has a detrimental effect on their overall academic performance. This paper reports the design and development process of a 3D Virtual Tour application for the University of Mauritius, to assist new students especially enrolled on DEOL programmes to better integrate the educational ecosystem of the University. We present the results of a first evaluation of the system done with a group of students through survey questionnaire and a focus-group discussion to gather feedback and perceived usefulness of such a system to enhance their educational experience on the campus.

TESTING THE EFFICACY OF AN SMS-BASED TUTORING SYSTEM

Rashid Mahmood

This research project will explore the use of SMS messages as a means to measure student learning outcomes as well as a potential virtual tutoring system for primary school students. The main objectives of the research are to assess: (a) whether student learning outcomes can be remotely measured via SMS as a substitute to standardized testing, (b) check if SMS-based tutoring can help improve student learning outcomes, and (c) whether SMS based tools can improve parental involvement in student development in underserved areas. Convenience sampling is done for the study, I got access only two public schools in low social strata area in Lahore. The sample population consisted of two primary public schools

and grade 5 was chosen for the study I got permission to conduct study in grade 5 only. The mobile numbers of the parents of students were collected by the school administration and were shared with me.

MONITORING A MOOC: THE ANALYTICS MODULE OF A MOOC MANAGEMENT SYSTEM

Ravi Mula, Rajat Jain, & T. V. Prabhakar

Online courses offer interesting opportunities to observe student behavior and learning patterns. All the interactions of the student from login to logout are recorded. A proper analysis of this data can reveal the engagement level of the student with the course, with the course content and with other learners. In the absence of face-to-face-interactions with students, this is an invaluable feedback to the Instructor. mooKIT is a versatile MOOC Management System designed with a state-of-the-art learning analytics. mooKIT logs all events that happen during a user session and provides a powerful graphical user interface for the Instructor to make sense out of this. The analytics are presented at a lecture level (like what is the viewing pattern of a lecture), and at an individual student level, on a time scale. These can be used to figure out the difficulty level of each lecture and for each student. Analysis of the Forum activities, like volume of questions, interaction among students, the sentiment of the comments etc. can be used to get a good understanding of the social behavior and comfort level of the students. By being able to predict the students who are likely to drop out from the course, the system enables the Instructor to take remedial actions. One can use the predictive analytics to configure the machine for hosting. In this paper, we discuss the kind of learning analytics that are possible using mooKIT as an example.

SENSORAPP - THE LIGHT AT THE END OF THE TUNNEL FOR THE VISUALLY IMPAIRED LEARNERS

Roopesh Kevin Sungkur, Hansraj Bissessur & Krishna Camdoo

The learning community is a very heterogeneous one but 'inclusion' is a concept that should stand high on the agenda of every learning community. All students with disabilities, in whatsoever form, should have access to proper teaching and learning and should not be left out of the educational system. Learners who are visually impaired, nowadays, have access to a number of technologies that can facilitate the learning process. During the last decade, learners have been using smartphones, which has grown significantly, in their everyday life. Learners are regularly encouraged to use their personal devices for learning processes. In addition, the majority of mobile learning applications do not make the most of the smartphones, which have interesting features such as Accelerometer, Gyroscope and Touchscreen. SensorApp, a free mobile learning application that makes use of different motion sensors to enhance learning experience has been developed in this research. The platform that was critically chosen for this application is Android. The integration of text to speech and speech to text in this application has breached the divide between visually impaired students and those with no vision problems. SensorApp involves the use of sensors to measure distance, speed, level of surface and a number of other features. With use of the magnetic field sensor and accelerometer sensor, it also allows users to find the position of the North. In addition, the application makes use of GPS satellite to get the user's current location

and using these coordinates the application can measure the distance travelled by the user between two points or the speed at which the device is moving. The Accelerometer Sensor will also help to measure the level of surface. It can help to deduce whether a surface is horizontal, vertical or at 45-degrees angle. The Voice search is an interesting feature that will be helpful to the visually impaired students. The word spoken will be converted to text and the application will direct the user to the desired screen. Visually impaired learners who have tried the SensorApp application have found it very interesting and innovative.

THE EFFECTS OF SOCIAL MEDIA ON STUDENTS' STUDY HABITS

Rose Tilije

The researcher(s) tend to treat social media use and study habits as mutually independent variables. Consequently they tend to treat one of these variables as a causative of the other. This is not tenable. There are also likely to exist a large number of intervening variables, like economics (influencing access to and use of social media), or the social strata (influencing the type and frequency of social media use). The researchers also treat social media (and its use) as a single variable. It would have been better to treat it as composite variable - the kind of social media, frequency, type of device (and hence time and place of use), nature of use, student perceived need for social media use, and addictive / compulsive use, peer pressure to use, etc. All these finer details would have helped support the conclusions. Presently, the conclusions are merely statistical outcomes, which do not help answer, why the results emerge. While preparing the full paper, you may like to revisit your assumptions based on the comments here, and update the abstract accordingly. You should also make a logical argument for use / non-use of social media, its relationship (not merely state a statistical confidence) with study habits. Also include your recommendations in brief in the abstract to help readers know the findings and conclusions.

RESOURCE ARCHITECTURE IN THE VIRTUAL DIGITAL LEARNING LANDSCAPE (RAVD)

Rozhan Mohammed Idrus & Mohamad Faiz Taip

As technology becomes pervasive, the teaching and learning landscape is now capable of presenting an interoperable and seamless learning architecture to connect, integrate, and share learning resources. Although we have a plethora of learning resources, searching for specific content is not easy and takes time to view and identify the content being searched. As such a tagging metadata mechanism is envisaged that will facilitate for content search. The tagging of these learning objects will lead to an intelligent virtual content selection environment that will facilitate for any content to be searched based on each of the elements of learner, subject, pedagogy and technology via the Resource Architecture Metadata Input (RAMI). Ultimately, a content directory is envisaged to accentuate the digital learning landscape resulting in the Resource Architecture in the Virtual Design environment (RAVD).

PUSHING THE BOUNDARIES: MIGRATING ONLINE IN A DEVELOPING CONTEXT

Ruth Aluko, Tony Mays & Hendri Kruger

In this paper, the authors use the National Association for Distance Education's (NADEOSA) criteria for program development and Mishra and Koehler's Technological Pedagogical Content Knowledge (TPACK) framework, to share how a paper-based distance education model is in the process of being migrated into a web-dependent blended model that is responsive to the changing environment in a particular developing context. The change was necessitated partly by the University of Pretoria's decision to adopt a web-dependent "flipped classroom" model; partly by a desire to improve retention and success rates and partly by the new minimum requirements stipulated for teacher qualifications by South Africa's Department of Higher Education and Training. The new government policy encapsulates the notion of integrated and applied knowledge, which gives renewed emphasis not only to what is to be learned, but also to how it is to be learnt. Embedded in this is the ability to use technology. How did the University push boundaries without necessarily locking out disadvantaged students? What lessons learnt could advance the field of appropriate programme design in distance education? These are some of the questions which the authors attempt to answer.

TECHNOLOGY AND INNOVATION

Sabeen Almas & Sadia Hussain

One of the greatest challenges faced by countries like Pakistan is creating productive employment for a vast number of youth populations. Young girls/women are mostly excluded from all the opportunities of education and training. Skilled human resources are one of the major binding constraints to sustaining high economic growth thus its time of the hour to invest significantly in human capital to reap the benefits. Cheap labor and abundant natural resources are no longer a comparative advantage for a country like ours. Rather productivity gains driven by knowledge, skills, and innovation are the real advantages. In this context, vocational education and training will be able to help young people especially girls to acquire skills and knowledge to ensure their successful participation in society. SPARC with the kind support of Commonwealth of Learning (COL) is implementing two projects in different cities of Pakistan to empower marginalized girls by providing them vocational training, life skills-based education, financial literacy and enterprise development. Some of the newer technologies are being used to motivate young girls to engage in vocational training; for example use of mobile phones, social media marketing and use of multimedia to engage learners in remote and hard to reach areas. Some innovations in COL project for the targeted communities are quite a new experience. Even simple technology like the use of a computer, mobile phones, TV, and multimedia are new tools to be used for learning purposes. Skill trainers at SPARC' centers are being innovative in a variety of ways but the issue is that most of their work is experience based and not documented. What is clear is that they need spaces to enable testing of new ideas and then to share these with their peers. There needs to be a culture where experimentation is possible, in a context of learning from experiences, we are encouraging staff members to share their experience through Skype conferencing among more than five vocational centers. We are also looking forward to video documentation of their work and upload it online to reach a maximum number of targeted

beneficiaries through a platform called Community of Practice, CoP, another innovative concept introduced by COL. For the SPARC project team, the experience of a Fluid survey on mobile devices such as phones, or computer tablets is providing another opportunity. With a new supporting partner, SPARC intends to launch an eCommerce Training that could compliment the already started vocational and business skills training at its centers across Pakistan. Large, as well as small businesses now, realize that the Internet is the ideal communication medium for interacting with a wide variety of stakeholders. They also know that the Internet is not just the Web, but a range of technologies that, in combination, can provide a potent marketing strategy. Business through the internet can be a blessing for a developing country like Pakistan where it is particularly challenging for girls and women to go out frequently to promote their businesses. Through the skill of e-commerce, girls and women from remote and underprivileged areas can easily access their customers/client to promote their products and services. SPARC intends to provide training in basic e-commerce to the girls enrolled in the above-mentioned project besides teaching them enterprise and vocational skills so that once these females graduate from SPARC's centers, many of them are economically empowered and independent. Several pieces of research show that violence against women, illiteracy and child early and forced marriage issues are reduced when economic empowerment is provided to them. The enrolled females will be introduced to techniques such as how to break down the target audience, how to build a coordinated marketing strategy using the integrated Internet marketing matrix to reach their customers and stakeholders, and how to measure the effectiveness of promotion strategies. The objectives that the e-commerce training is as follows:

1. Describe the term e-commerce
2. Illustrate with examples of how people are using the Internet to market wisely;
3. Have a clear understanding of the Integrated Internet Marketing (I2M) model;
4. Examine the Web as an advertising medium, using established theoretical models of consumer and industrial buying behavior,
5. Know how to move the customer from being a passive Internet surfer to an interactive user of the medium.

Apart from in-house vocational training, SPARC's team is conducting community mobilization and awareness sessions in the community and meeting relevant stakeholders to explore internship and employment opportunities for the trained girls. Mobile Learning: Tablets will be provided to girl trainees to get them exposed to the experience of Open and Distance Learning (ODL) and also to share their experiences and upload audio/video messages. Moreover, the skill centers are also shifted from one location to another to cover a maximum number of girl beneficiaries thus creating an environment of a mobile learning experience. Collaborative Work: In Pakistan, there are many governments and nongovernment institutions that are providing technical and vocational training in formal and informal settings. Some of these institutions employ training specialist who can teach a wide range of skills including industrial work. These networks must develop collaboration to create massive impact and share their learning experience to enhance the capacities of smaller organizations. Through collaboration, more focused efforts can be done, overlapping can also be avoided and need based initiatives can be taken. For this purpose, SPARC is working on several initiatives of collaboration with government departs and related ministries, e.g. Sindh Provincial Training and Vocational Authority and Ministry of Commerce. COL is also developing collaboration

among partner countries to share experience and learn from each other. Open Educational Resources (OER) are free and openly licensed educational materials that can be used for teaching, learning, research, and other purposes. SPARC training modules, brochures, and State of Pakistan' Children (SOPC) reports and all other research publications especially on girls and women can be accessed through an official website, www.sparcpk.org and can be used for learning and research purposes. SPARC is also introducing girls to other free online available courses related to enterprise development and entrepreneurship to widen their scope of learning and global perspective.

SUPPORTING DISTANCE LEARNERS THROUGH MOBILE APPS: A CASE OF BOU

Sabina Yeasmin, Md. Mizanoor Rahman & Crk Murthy

Bangladesh Open University (BOU) develops a series of apps to deliver course materials to learners' smartphones and tablet devices, starting next year. Currently, BOU Apps is allowing learners to access their main information through their handheld devices; along with the audio and visual content the BOU produces to support studies. It is being designed from the ground-up for touch interfaces, and offers high quality visual images rather than lists and the learners are more interested to complete their learning. Mobile apps provides learners with effective learning experiences. The apps are made available across Internet and learners can download this in their smart phones. Recently, it is found that BOU learners of the traditional ODL programmes are using mobile device in the tutorial centers rather print (hard copy of SLMs). Currently BOU delivers textbooks from study center and/or RCs/SRC and radio-TV broadcasts. The apps are able to streamline all these different course resources into a single interface. This study investigates that apps can automatically render a single input file to multiple formats (print, web and ebook) – giving it the ability to repurpose existing study materials for new delivery mechanisms such as mobile. A total of 206 students took part in this study through questionnaire used Likert scales to investigate attitudes and perceptions towards BOU apps and provided open ended responses for additional comment on the apps they used. The study finds that in future iterations at BOU will be through BOU Apps and it will look to create "new learning products" specifically designed for mobile and tablet devices. Our results suggest that students need technical, logistical, and pedagogical support for integrating mobile devices and apps. BOU's future plan should be to continuously update the faculty support resources and implement them on a larger scale.

BUILDING AN EFFICIENT AND EFFECTIVE TEST MANAGEMENT SYSTEM IN AN ODL INSTITUTION

Safiah Md Yusof, Tick Meng Lim, Leo Png, Zainuriyah Abd Khatab & Harvinder Kaur Dharam Singh

Open University Malaysia (OUM) is progressively moving towards implementing assessment on demand and online assessment. This move is deemed necessary for OUM to continue to be the leading provider of flexible learning. OUM serves a very large number of students each semester and these students are vastly distributed throughout the country. As the number of learners keeps growing, the task of managing and administering examinations every semester has become increasingly laborious, time consuming and costly. In trying to

deal with this situation and improve the assessment processes, OUM has embarked on the development and employment of a test management system. This test management system is named OUM QBank. The initial objectives of QBank development were aimed at enabling the systematic classification and storage of test items, as well as the auto-generation of test papers based on the required criteria. However, it was later agreed that the QBank should be a more comprehensive test management system that not just manages all assessment items but also includes the features to facilitate quality control and flexibility of use. These include the functionality to perform item analyses and also online examination. This paper identifies the key elements and the important theoretical basis in ensuring the design and development of an effective and efficient system.

COLLABORATIVE LEARNING FOR RURAL COMMUNITY THROUGH COMMUNITY LEARNING PROGRAMME USING COMMUNITY RADIO IN BANGLADESH

Saifuddin Ahmed Bhuiyan Saifuddin Sabuj

Though this is an age of digital technology, more than 75% people of Bangladesh still live in the villages and hard to reach area. Hence radio still dominates over all other media in these villages or dark area. CLP: an approach of Collaborative Learning Community Learning Programme-CLP, the distance learning project of Rupantar is concerned with the collaborative learning of illiterate and semi-literate grassroots listeners and the literate personnel. This is mainly for the people living within coverage area of community radio, located in the rural areas. We work with 7 CRS in Bangladesh, where CLP is introduced and each station has special weekly learning programme. Participation and collaboration of the community in planning, designing and production process is given emphasize here from selecting the topic to design, production period as well as are interviewed to obtain suggestions. A series of learning (radio) program production on different learning issues like, human rights, livelihood, health etc is going on with the partnership of COL and CEMCA. Thus, in a collaborative learning setting (field interview, face to face discussion), learners have the opportunity to converse with peers, present and defend ideas, exchange diverse beliefs, question other conceptual frameworks, and be actively engaged. Characteristics of Collaborative Learning

1. Issues are selected involving community people
2. Community takes part in design, production process
3. Community people share experience and subject experts provide solution
4. Learners listen to the programme in a group and discuss on learning issues.

They also provide opinions, feedback sending SMS, phone call Impact Community radio stations are natural partners for this approach to participatory non-formal learning. Community Learning Programme through community radio is creating important and timely impact on these illiterate or semi-illiterate girl and women who do not have adequate opportunity to receive formal education from school.

TOOL FOR EVALUATING LEARNING IN AN OPEN, ONLINE AND FLEXIBLE LEARNING ENVIRONMENT

Sameena Falleiro

There has been continuous progress in exploring various platforms to implement online learning. Notwithstanding the same, one pressing requirement is to understand the kind of learning taking place in these environments. Student Engagement and Motivation are important factors that help the learning process. This paper evaluates an Engagement and Motivation scale and an Evaluation Rubric-(ER), that has been designed by the researcher as a tool, to examine the effectiveness of learning in Learning Management System-(LMS) through a two sample 'post-test only' experimental research design. The paper discusses the development, validity, reliability and the scoring method of the Engagement and Motivation scales. The researcher developed the Engagement Scale using a four-point rating scale with 21 items, with an objective to study the cognitive, affective and behavioral aspects of engagement. The Motivation Scale was developed by suitably modifying and adapting Keller-ARCS motivation scale to this study. The scale was developed using a five-point rating scale with 24 items, with an objective to study the attention, relevance, confidence and satisfaction aspects of motivation. The researcher also developed ER as a tool to help determine the extent to which features like Chat, Discussion Forum, Quiz, Glossary and Assignment actively promote student engagement and participation. Further subdivision of each of the features was done to find out to what degree these learners are engaged and motivated with their educational activities, so as to study the nature and quality of interaction that the participants have in the various activities of LMS. The scores obtained from the ER helped determine whether such activities appeal to the learners thereby increasing their engagement and motivation. The findings are useful to conclude that if these tools can be used to measure effectiveness of learning in LMS, they can be used to examine learning for any other open, online flexible learning environment.

LEARNING MANAGEMENT SYSTEM TO SUPPORT TEACHING AND LEARNING: FACULTY AND STUDENTS' EXPERIENCES AT INTERNATIONAL ISLAMIC UNIVERSITY ISLAMABAD

Samina Malik, Fouzia Ajmal & Nabi Bux Jumani

The current study was undertaken to explore the experiences of students and the faculty members involved in Distance Education programs regarding the usage of Learning Management System (LMS). The students and the faculty members were given training on using LMS prior to the start of their weekly weekend classes. A survey was conducted to know the experiences of 28 students enrolled in the first batch of Distance Education programs, while interviews were conducted from 12 faculty members. The quantitative data were analyzed by using mean scores and percentages, while the interviews were analyzed by utilizing thematic approach. It is evident from the results that LMS being utilized at IIUI offered an extensive program to the faculty and the students. It helped teachers to keep a track of all the work done during the semester, offered course management, and served as a communication tool regarding class schedules, meeting timings and assessments.

MAINSTREAMING USE AND ADAPTATION OF OPEN EDUCATIONAL RESOURCES IN INDIAN HIGHER EDUCATION: A MODEL

Sanjaya Mishra

India has the over 700 universities, 48,000 colleges level institutions, 30 million students and 1.2 million teachers in higher education. As the diversity of the country, access to quality learning resources to all the students is also diverse and not equitable. While some institutions have huge resources, others suffer from lack of resources, and even faculty in some disciplines. The Ministry of Human Resource Development, Govt of India started a programme called National Programme on Technology Enhanced Learning (NPTEL) on developing learning content for engineering and basic science courses with several Indian Institute of Technology as partners in 2007. This programme became part of the National Mission on Education through ICTs (NME-ICT) in 2009. In 2014, the NME-ICT project advisory board, approved open license for all content developed under the NME-ICT projects. While there is huge potential of OER in Indian context, not many institutions have OER policies, and use and adaptation of OER is low. We conducted a study to understand the reasons why teachers in Indian higher education institutions do not use or adapt OER. We adapted a framework of attitudes, motivation, quality perceptions and barriers to understand the issue of OER use and adaptation in Indian universities. We conducted research in four universities across the country using interviews and survey to collect data. Based on the analysis of the data, we proffer a model for mainstreaming use and adaptation of OER in Indian higher education institutions. Results show, teachers have positive attitudes and are motivated to use OER. However, they lack knowledge and skills of using OER, including understanding of copyrights and licensing issues. They consider reputation of the OER provider is the basis of OER quality and would use OER if a resource fits the curricular purpose. Our model emphasises strengthening OER knowledge and skills, institutional policy, provision for extrinsic motivation such as recognition and collaboration opportunities, and support to adapt OER.

ASSESSING E-LEARNING MATURITY @ UNIVERSITY OF MAURITIUS USING EMM V2.3 AS A BENCHMARK

Santally Mohammad Issack, Anna Crystel Chu Sun Wah & Goonesh Bahadur

The e-Learning initiative at the University was launched in 2001 with the setting up of the Virtual Centre for Innovative Learning Technologies. Fifteen years later, the initiative has attained a level of maturity where 4 programmes of studies are offered on a mainly online mode of delivery. The Centre has developed capabilities over time in the area of content development, instructional design, educational technology, and online course delivery and support through which the University of Mauritius has been able to deliver fully online programmes. Quality assurance is an important component when it comes to the credibility and perceived value of online courses, and in this context the Victoria University of Wellington has developed the e-Learning Maturity model, by which institutions 'can assess and compare their capability to sustainably develop, deploy and support e-learning'. The model consists of five key areas of assessment, namely Learning, Development, Support, Evaluation and Organisation. This work essentially aims to benchmark the eLearning practices at the University of Mauritius with version 2.3 of the eMM. It will help us identify gaps and address issues inherent within our current operational model to improve our existing processes and quality delivery of online courses.

EXPLORING ACCEPTANCE & USE OF OPEN EDUCATIONAL RESOURCES BY ACADEMICS IN OPEN UNIVERSITIES IN INDIA

Saroja Govada

The concept of 'Openness' in education has become a significant development since the establishment of the first Open University in UK in 1969. Openness in education was basically meant to open up education to large segments of population and take education beyond the four walls of traditional campus based education. The emergence of Internet and World Wide Web have provided opportunity to share and use the information and opened up increased access to information. This paved the way to the concept of Open Educational Resources (OER) that force the educationist worldwide to rethink and redefine the concept of 'Openness' in education. The basic idea behind the development of OER is that knowledge exists for the public good. A large portion of the academic community believes that access to knowledge is critical for the development of the society and increased restrictions on the use will hamper the creativity and result in inequalities. However, not all academics support open scholarly content. Some fear that there is a threat of inappropriate use of their intellectual property and some worry about the potential loss of revenue to the institutions and individuals. This paper intends to explore the acceptance and use of OERs by academics of Open Universities in India. Study is based on analysis of 69 responses obtained from faculty working in 10 open universities in India. In the light of the data collected, this paper discusses the factors to be considered for sustainable OER practices.

SCHOOL TEACHERS OPINION ABOUT STAFF DEVELOPMENT USING D/E MODE FOR EDUCATIONAL TECHNOLOGY APPLICATIONS TO MANAGE CLASSROOM ACTIVITIES

Satish Rastogi

School teachers deal with infants and children to make them capable for meeting future life challenges. In a classroom situation every teacher faces problems like Individual Differences among students, Optimum Learning, Quality Control, How to manage classroom activities, Effective communication in classroom, etc. With a view to empowering these school teachers in Swaziland, a Module in SIM format entitled "Educational Technology for Effective Teaching" having 17 units was distributed among 621 teachers for a 3 months self- study followed by peer group interactions as well as interaction with resource persons using media as well as a 2 days contact programme to meet queries, confusions, questions etc. if any. The module covered - The nature and scope of Educational Technology; Managerial approach to classroom communication; Systems approach to teaching and learning process; Bloom's taxonomy of educational objectives: its utility to classroom communication; Pedagogy and Andragogy in the teaching and learning process; Instructional modes for classroom interaction; Learning Activity; Learning theories for classroom communication; Motivation, interest and emotions: meaning and role in learning; Verbal and non-verbal communication ; Role of audio/video aids in teaching and learning process; Roles of computers in the teaching-learning process; E-Learning - Its Mechanisms and Classroom Applications; Mastery learning for effective teaching; Individual differences among learners; Assessment, measurement and evaluation: meaning and utility for examinations; Various types of test items and their application in examinations. An Opinion scale was administered to this group after contact sessions in batches to seek their opinion about utility of various 17 Units

in the Module, difficulty in understanding some content in various modules, opinion about various activities during Orientation programme, Interactions during 3 months self-study, effectiveness of 2 days contact sessions and something extra if any. The purpose of this opinion survey was to enhance the quality of this staff development programme for rest batches of school teachers in Swaziland. The data using this Opinion Scale will be collected during 3rd and 4th week of June and the findings will be presented during PCF8 conference.

NEW APPROACHES TO CAPACITY BUILDING ARE NEEDED TO FORM A SUSTAINABLE PLATFORM FOR KNOWLEDGE ECONOMY

Shahab Afroz Khan & Otto Evjenth

Innovation is most frequently generated when a need is recognized and an opportunity is identified. We have over the last 20 years been increasingly aware of the fact that the teaching paradigm for standardized periodical educational activities which was generated by the needs of the industrial society are meeting with the needs for a learning paradigm generated by the individualized continuous capacity building in the information society. The learning processes are due to new information and communication technologies facilitating convergence between cognitive impulses coming from media and educational institutions and through the convergence of cognitive learning processes and information processing. The behavioral patterns of learners connected with learning and media usage are converging and the awareness and basic information the media literate learner is establishing is increasingly becoming an important platform for the structured education and the lifelong learning processes which seem to be influencing on most of us both connected with the mastering of professional life and the mastering of social life. It is based on the above reflections we have been designing and testing a methodology which is providing communities with affordable access to information and courseware which is applicable for the handling of their specific challenges. The Smart Community Concept is in short offering the local population an opportunity to define their needs and access information of relevance. ABU&YAM have in collaboration with education service providers and communication companies in Pakistan designed a solution which will be installed in rural and urban communities for a study of the educational methodologies. The technologies which are to be used are well tested and proven.

NEW MEDIA TRENDS AMONG ODL STUDENTS IN PAKISTAN AND THEIR IMPACT ON LEARNING

Shahid Hussain

This research study aimed at exploring the new media trends among the open and distance learning students in Pakistan and the ultimate effects of excessive usage of various media outlets on educational learning, life pattern and social capital of the students. The study also tested the Time Displacement Hypothesis of Robert Putnam (1995), which postulates that the heavy usage of media causes the decline in the time spent in other important activities like learning, interpersonal communication, social and physical activities, and which ultimately erodes the social capital of users. The sample size was 500 students of various educational levels studying in AIOU, Islamabad, Pakistan and the data was collected through a survey with the help of a self-administered questionnaire. The regression model has been implied to

explore the relationship between new media trends/activities of the students and their affects on educational learning, life pattern, physical activities, exercise and social capital. The results show that the study has not predicted any displacement effect of the use of internet on social capital and educational learning of the university students in Pakistan. These findings do not support the popular view that heavy users of internet are more isolated and less connected to society than the non-users. However, the study supports the Uses and Gratification theory of Katz, Blumler, & Gurevitch (1974), which says that the media users are active and no more passive and they use various media outlets to best gratify their social and psychological needs.

TRANSFORMATIONAL CHANGE AT THE INTERSECTIONS OF TECHNOLOGY, EDUCATION AND DESIGN AT THE OPEN UNIVERSITY OF SRI LANKA

Shironica P. Karunanayaka, Som Naidu & Mohan Menon

Technology, education and design are at the heart of any educational transaction. For optimum impact these need to be carefully choreographed and orchestrated. Despite acknowledgement and acceptance of technology, education and design as critical attributes of any successful educational transaction, bringing them together to ensure transformational change, both at the individual and at the institutional level, remains a serious challenge. This includes not only the development of the knowledge and understanding of the subject matter content, but also a rethink and reorientation of the essential value principles of education. This paper reports a case study of the experiences of the Open University of Sri Lanka in bringing about such transformational change in relation to the adoption of open educational practices (OEP) over the past decade. This is captured in the narratives of key participants involved in the projects. These achievements comprise: 1) the professional development of academic staff in the integration of OER; 2) a robust model for the integration of OER; and 3) a rigorous approach to the evaluation of the impacts of OER integration on a range of dependent variables including perceptions and practices of educators towards OEP.

DESIGNING REFLECTIVE PRACTICE IN THE CONTEXT OF OER-BASED E-LEARNING

Shironica P. Karunanayaka, Som Naidu, J.C.N. Rajendra & H.U.W. Ratnayake

Much is said about the importance of reflective practice especially in the professions. Yet much of what happens as part of reflective practice in the professions such as teaching is most of the time left to chance. Reflective practice allows practitioners to see the link between theory and practice by thoughtfully considering their own experiences, and applying knowledge into practice. In this paper we argue that for reflective practice to be meaningful and useful to professionals, it should be carefully designed with appropriate structure and guidance. We discuss how this was achieved by being pro-active about promoting and nurturing reflective practice within the context of a professional development program with Sri Lankan educators on OER (Open Educational Resources)-based e-Learning, and how it supported fostering Open Educational Practices (OEP). The OER-integrated online learning experience was designed with various strategies adopted to enhance reflection 'in' and 'on' action, within a situated learning pedagogical design – Scenario-based learning (SBL). Content analysis

of the qualitative data mainly gathered through participants' self-reflections, supplemented with course team members' reflections, focus group interviews and the open-ended questions in questionnaire surveys revealed that a scenario-based approach to learning incorporating authentic learning activities and assessment tasks such as concept mapping, online discussions, reflective journal writing, and rubric-based feedback on assessment tasks, all helped scaffold participants' approach to reflective practice. Results show that these strategies that were adopted enhanced their critical thinking, creativity, collaborative learning as well as self-esteem, also indicating a shift towards OEP. We conclude that careful design of the learning experiences is critical in promoting and supporting reflective practice among educators, and the use of such strategies in the design of OER-based e-Learning.

SOCIAL INTERACTIONS USING SOCIAL MEDIA IN OPEN AND FLEXIBLE DISTANCE LEARNING SYSTEM

Sushmita Mitra

This paper discusses the status and use of social media in India with an attempt to throw light on the need to use social media in Open and Flexible Distance Learning (OFDL) systems in the country. Education and training systems are affected by several emerging trends in the current Knowledge Society. One major trend is the use of social media which are a collection of online platforms and tools that people use to share content, profiles, opinions, insights, experiences, perspectives and media itself, for online conversations and interactions between groups of people. Social media is interaction driven and user controlled around user-generated content. Among the most popular social media tools are Facebook, Twitter, Instagram and Pinterest. But there are hundreds—even thousands—of Web-based tools for consumption, curation, conversation, collaboration and creation. Today's younger generation – people born in the early eighties or later – have grown up surrounded by different digital technologies that have shaped the way in which they live, think, learn and interact. This seems to be true in all countries including developing countries like India. The paper discusses whether social interaction using social media tools could be used in instructional environments of OFDL to increase interactions, to bridge learner isolation, and to assist in the process of cognitive development of the learners.

OER CONTRIBUTING TO EARLY LITERACY IN AFRICA: EVIDENCE FROM SAIDE'S AFRICAN STORYBOOK

Tessa Welch & Jennifer Glennie

One of the major reasons for poor literacy levels among African children is the severe shortage of local language contextually appropriate materials for African children learning to read. To contribute to addressing this challenge, Saide's African Storybook initiative is testing an alternative publishing model. The website www.africanstorybook.org provides not only openly licensed stories for use, but also the tools for the translation of stories, and tools for the creation of stories, which are in turn openly licensed. The paper provides evidence that 'going the open way' can produce the quantity of stories needed in the languages needed for young children to practise and learn to love reading. In addition, the publishing model both requires and stimulates teacher and community agency and encourages use.

IMPACT ANALYSIS OF TEACHING LEARNING USING WHATSAPP

Venkata Suresh Pachigolla & Madan Mohan Pant

The objective of the paper is to present results of impact analysis of offering Courses through WhatsApp from both Teacher and Learner perspective. A 7-day course titled LEARNING WITH MOOCs was offered using WhatsApp. A total of 256 persons registered which is the maximum possible. There were designated resource persons who will be posting about the topics at different intervals based on the interaction of learners. Interaction was allowed throughout the Course. The last day of the Course included a Workshop that had some of the registered learners personally present and the others on WhatsApp. The workshop was also made available through YouTube. After the 1 week course was completed, Impact Analysis was done based on the following and other factors: (1) Number of active participants (2) Total number of posts (3) Number of Women participants (4) Nature of posts (5) Number of irrelevant posts (6) Overall Feedback. The results of Impact Analysis shall be presented in the paper.

ADVANCING HIGHER EDUCATION WITH MOBILE LEARNING: A STUDY OF FEMALE STUDENT'S INFORMAL EXPERIENCES IN CAMEROON

Yeba Judith Sama Mouokuio Meno

This study seeks to find out how mobile learning devices can enhance access to education for female students in higher institutions of learning in Cameroon. This study focuses on women who have the problem of time management due to their numerous gender roles, making it difficult for them to advance in education. The study hypothesizes in the main that there is a significant relationship between the use of mobile technologies and educational advancement of female students. The population consisted of Masters Students of the Virtual University in Cameroon and the Doctoral Unit of Research and Training in Science of Education and Educational Engineering in the University of Yaounde I all, of the 2014/2015 batch. The quantitative and qualitative methods were used. The stratified and simple random sampling methods were used to select the samples. Fifty two female students were sampled at the Virtual University and 56 at the Doctoral Unit. We obtained quantifiable data regarding current use, perceptions and adoption of the mobile learning devices while qualitative data gave us a better understanding of the topic. Data were presented by percentages, on graphs, tables and charts for consistency and analysed through description and interpretation of the meanings of the information provided by the participants. The results revealed that there is a link between the use of mobile learning devices for asynchronous learning and educational advancement of female students. We recommend amongst others that women like men should be sensitised to the value of education in their lives and the advantages of mobile and asynchronous learning especially to women who encounter the problem of time management due to their inhibitive gender roles. Mobile learning which takes place anyway anytime will be of help to the women who can study even in the comfort of their home.

MOTIVATION, EXPERIENCE AND SATISFACTION AMONG ADULT LEARNERS WITH FULLY ONLINE WEB-BASED COURSES

Zulaika Zakariah, Raemah Abdullah Hashim & Nuruljannah Musa

The purpose of this paper is to explore the correlation between motivation, experience and the level of satisfaction among fully online adult learners in an Open Distance Learning (ODL) institution. These attributes are commonly studied separately to examine the level of its influence among online adult learners but infrequently collated as one in a study. Based on this, a survey was carried out to adult learners who are currently undergoing Bachelor of human resource and tourism management courses that are fully online. A structured questionnaire survey was used in data collection using Google Drive as the platform to distribute. Overall, 69 online students completed the survey. Although the sample is relatively small and may not contribute significantly to the literature, it does provide an essence to the institution of research as the fully online courses offered by the university are relatively new. Research from this viewpoint, shows that learners are highly motivated with the concept of online learning mainly agreeing that fully online courses allows them do well in class providing if the materials are studied appropriately. However, their experience and satisfaction with the fully online platform does not match the high level of motivation. Contributing factors to the dissatisfaction would be the limit of personal interaction and reliance on own self-discipline. Generally, the respondents showed an average level of satisfaction with the fully online courses. Nonetheless, flexibility of location and time provided by fully online learning remained to be the top reason for satisfaction. The implication of these findings discusses how instructors and course designers provide the necessary technical support to fully online learners in managing their level of motivation and satisfaction.



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