

#### University of Zambia

in conjunction with



#### **Hiroshima University**

#### Presents the

#### 14th University of Zambia (UNZA)-Hiroshima University (HU)

#### **Research Dissemination Seminar**

#### **16th and 17th August 2023**

#### Acronyms

HU: Hiroshima University

GSHSS: Graduate School Humanities and Social Science

NSC: National Science Centre

MSE: Mathematics and Science Education

UNZA: University of Zambia

MOE: Ministry of Education

EV: Evelyn Hone

CU: Chalimbana University

ZAMISE: Zambia Institute of Special Education

MU: Mukuba University

RU: Rusangu University

The purpose of the two-day seminar is to bring together researchers from Zambia, Japan and other countries who are interested in exploring cutting edge research findings in mathematics, physics, chemistry and biology teaching and teacher education. The seminar will focus on a variety of topics in mathematics and science education.

### **SEMINAR PROGRAMME**

## Day 1 (16<sup>th</sup> August 2023)

Time	Activity	Facilitator	Chairperson		
08:30 - 08:50	Registration	Mr Ota, Mr Mainza Mr Banda; Mr Ono			
08:50 – 09:10	Introduction/Opening Remarks	Dr Liberty Mweemba Dean, School of Education, UNZA	Dr Christopher Haambokoma		
09:10 – 09:15	Introduction (scope of the seminar)	Dr G. Kaulu (MSE) Prof. K. Shimizu (GSHSS-HU)			
09:15 – 09:45	Learners' Problem-Solving Processes In Linear Programming At Selected Secondary Schools Of Lusaka District Of Zambia	Mr Sandambo Gabriel (MSE)	Dr C.		
09:45 – 10:15	Exploring the learning of the turning effect of a force through the lens of Peer Assisted Learning strategy in selected secondary schools of Kabwe district	h the lens sisted Learning strategy in selected  Mr Fundamwango Hanshel (MSE)			
10:15 – 10:45	Short Break				
10:45 – 11:15	A study of thinking processes in hypothetical setting with students in Zambia	Mr Ono Wataru (GSHSS)			
11:15 – 11:45	Opportunities and Challenges	Mrs Trudy Namoomba Siameja (MOE)			
11:45 – 12:15	High Failure Rate Among Pharmacy Students in Anatomy and Physiology at Evelyn Hone College In Lusaka, Zambia	r Failure Rate Among Pharmacy Students in tomy and Physiology at Evelyn Hone College In Dr Kambi Manda et			
12:15 – 12:45	The Provision Of Free Education And Its Mrs/Ms Kunda Sustainability- The Zambian Scenario Bwembya (MOE)				
12:45 – 14:00	Lunch				
14:00– 1 4:30	Topic to be supplied	Dr Benson Banda (NSC)			
15:00 – 15:30	A Study on Responsibility in Ugandan Teacher Education	Ms HONOKA Yokoyama (GSHSS)			
15:30 – 16:00	A study to Analyze the inclusion of students with Hearing Impairments in Mathematics and Science in the secondary Teachers" diploma at the Zambia Institute of special education	Nambula Ndopu et al (ZAMISE)			
16:00 – 16:30	Assessment of Integration of ICTs into the Teaching of Mathematics at three selected Secondary Schools at Junior level in Kitwe District	Mr Siwakwi Lewis (MSE)			
16:30 – 16:35	Reflections on the day's presentations /Closing	HOD, MSE	Dr G. Kaulu		

Day 2

Time	Activity	Facilitator	Chairperson		
08:55 – 09:00	Introduction/Opening Remarks	Dr Z. Ndhlovu (MSE-UNZA)			
09:00 – 09:30	A Study on Development of Children's Social and Emotional Skills in Junior Secondary Schools in Zambia	Mr OTA Kazuki (GSHSS)			
09:30 – 10:00	The Effect of Virtual laboratory on learners' performance and attitude towards learning acid-base reactions among grade 11 learners: a case of upgraded secondary schools in Mongu district	Mr Nicholas Sibinda (MSE)	Dr G. Kaulu		
10:00 – 10:30	A Case Study of Ugandan Primary School Children's Perceptions of Water in Nature	Ms ODA Yuka (GSHSS)			
10:30 – 11:00	Short Break				
11:00 – 11:30 11:30 –	Some Idea of Research in Science Education: Cambodian Cases What STEM Education Could be in Zambia's	Prof Kinya Shimizu (GSHSS) Dr Kabunga			
12:00 12:00 – 12:30	Schools  Commercializing Interdisciplinary Research, and Innovation outputs Via TV: Enhancing Industry-Academia partnership for Economic growth	Nachiyunde (MSE)  Dr Norman. Kachamba (RU)			
12:30 – 13:00	Teachers understanding of Empirical formula: Implications for Teaching and Learners' conceptual understanding of the concept	Dr Emmanuel Mweshi (MU)	Dr Z. Ndhlovu.		
13:00 – 13:55	Lunch Break				
14:00 – 14:30	An analysis of the factors that affect the use of Mathematics Software in the teaching and learning process of mathematics in Zambian Teacher Education Institutions	Dr Lemmy Kangwa (CU)			
14:30 – 15:00	Reflecting on the seminar and feedback from delegates Closing Ceremony, Photo session/ attendance	HOD, MSE			
15:00 – 15:30	Presentation of certificates	Dean			

# Collaborative Activities Between University of Zambia (UNZA) and Graduate School of Humanities and Social Science (GSHSS) of Hiroshima University

UNZA and GSHSS formerly known as International Development and Cooperation (IDEC) signed a memorandum of understanding (MoU) on "Academic and Educational Exchange" on 21<sup>st</sup> November 2002. Based on this agreement, IDEC and UNZA started to collaborate on research work of postgraduate students of IDEC.

UNZA and IDEC started to hold research dissemination seminars from August of 2007 onwards. These seminars draw participants from IDEC, UNZA, officers from the Ministry of General Education in Zambia, Malawi and delegates from various institutions. Different scholars and researchers present their research findings on various education issues in mathematics and science education. These annual seminars can be regarded as a deliberate effort to promote the integration of theory and practice through

the discussion with people from diverse backgrounds within Zambia and other countries. These series of seminars took a recess in 2020 and 2021 due to Covid-19.

The chart below shows the number of past presenters and organizations where they were (are) affiliated.

	Presenters								
	Date	UNZA (schola rs)& Gradu ate student s	Ministry of Education in Zambia (CDC, NSC, ECZ, schools etc)	HU (sch olar s)	HU Graduate Students	JICA JOC V	Inter- national (Others)	Total	Total Participants Inclusive of (UNZA Students)
1	7 <sup>th</sup> & 8 <sup>th</sup> Aug., <b>2007</b>	1	0	1	5	0	-	7	More the 100
2	7 <sup>th</sup> , Aug., <b>2008</b>	3	3	2	2	0	-	10	About 40
3	11 <sup>th</sup> Aug., <b>2009</b>	2	3	1	6	2	-	14	N/A
4	11 <sup>th</sup> Aug., <b>2010</b>	4	2	1	5	2	-	14	N/A
5	9 <sup>th</sup> Aug., <b>2011</b>	5	2	1	2	2	-	12	N/A
6	23 <sup>rd</sup> Aug., <b>2012</b>	4	2	1	2	2	-	11	About 50
7	21 <sup>st</sup> Aug., <b>2013</b>	6	2	1	2	3	-	14	About 35
8	19 <sup>th</sup> ., Aug., <b>2014</b>	5	2	1	3	1	-	12	About 35
9	19 <sup>th</sup> , 20 <sup>th</sup> Aug., <b>2015</b>	5	7	2	3	1	2	19	About 70
10	27 <sup>th</sup> , 28 <sup>th</sup> Oct. <b>2016</b>	11	0	1		3	5	20	61
11	21 <sup>st</sup> ,22 <sup>nd</sup> Aug <b>2017</b>	5	4	1	3	4	3	20	65
12	21 <sup>st</sup> ,22 <sup>nd</sup> Aug <b>2018</b>	21	1	1	2	14	0	39	139
13	20 <sup>th</sup> & 21 <sup>st</sup> Aug 2019	14	26	1	3	2	0		46 (plus many more undocumented number of undergraduate students)
	Total	65	53	14	36	22	10	200	