

CURRICULUM VITAE

1.0 PERSONAL INFORMATION

NAME: Dr. Marguerite Khakasa Miheso- O'Connor (PhD, PD)

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2.0 QUALIFICATIONS

2.1 *Academic Qualifications*

2013-2014 Post Doctoral fellowship in Mathematics education, University of Witwatersrand

2009: PhD in Mathematics Education, Kenyatta University, Kenya

2002. M.Ed (Mathematics Education), Kenyatta University

1996: Post Graduate diploma (Population Studies) University of Nairobi. Kenya

1980. Bachelor of Education,(Sc, Double Mathematics) University of Nairobi. Kenya

2.2 *Professional Courses*

1998: Completed an advanced certificate course in mathematics Education, Hiroshima University, Japan

1998: Completed a certificate of FACID and PCM (Project Cycle Management) course, Tokyo ,Japan

2011: Completed a technology course on moodling and Blackboard, Kenyatta University

2012: Completed an e-learning Module writing course, Kenyatta University, Kenya

2013: Completed course on Integration of technology in Education course,
Kenyatta University, Kenya

2014: Completed course on Geogebra software, University of the
Witwatersrand, SA

2014: Completed course on Zotera referencing software, University of the
Witwatersrand SA.

2.3 Other Courses

1995: Certificate in Computer programming

1998: INSET & trainer of trainers Facilitation Course, Hiroshima
University, Japan

2007: Mathematics Teacher Mentoring Course, Braeburn College, Kenya

2014: Journal writing workshop, University of the Witwatersrand, SA

3.0 EMPLOYMENT HISTORY

- 2013-2014; Doctoral Fellowship, University of the Witwatersrand
- 2010 to Date: Lecturer, Department of Educational communication and
Technology, Kenyatta University
- 2004- 2010 : Assistant Lecturer, Department of Educational
Communication and Technology, Kenyatta University
- 2007 -2012: Facilitator, MPhil, Teacher Mentoring, Braeburn College - Ku
Link
- 2001- 2004 : Senior Principal Lecturer, TSC & INSET provider (SMASSE
Project, MOEST, Nairobi
- 1998-2001: Principal Lecturer Mathematics and Mathematics Education, TSC
National trainer SMASSE Project
- 1994-1998: Senior lecturer, Mathematics and Mathematics
Education, Kenya Science Teachers college-TSC- Nairobi

- 1984 – 1994: Lecturer Mathematics and Mathematics Education, Kenya Science Teachers’ College, TSC- Nairobi
- 1980-1984: Tutor Mathematics Education, Machakos Teachers’ College, TSC, Machakos

4.0 ADMINISTRATIVE RESPONSIBILITY (AT KU)

4.1 *At Kenyatta University*

- May 2013-present: Board member, Centre for Teacher Evaluation and excellence
- Oct 2012 –Present: Member , Academic Audit Committee
- Dec 2012 –Present: School of Education representative, Students Career –day planning Committee
- July 2011 – Present: Student Mentor
- March 2011: Committee Member ;‘ Alighning Education with new constitution’
- April 2011 : Member of ADB consultants meeting
- 2011: Member of Teacher professional development course program committee
- 2012 June: Member of Strategic planning committee School of Education
- 2007-2014: Board member Regional Centre for capacity Development, Ku- ReCCaDE
- 2005 – Present; Coordinator, mathematics Education Methods course , (undergraduate , Graduate and PhD Programs)
- 2005- 2010 : Convener, ComTech Department seminars

4.2 *At Other Institutions*

- 2009 – 2012. Member KU- Braeburn college mathematics mentoring program
- 1998-2004. National Trainer, Mathematics (SMASSE Project)
- 2009; Panel member, Diploma program assessment, KNEC Program
- 2012. External programs valuator KIE (Kigali Institute of technology
- 2013. Editor, South Sudan Teacher Education United Curriculum material (mathematics)
- 2014.- present ; External supervisor, PhD . University of the Witwatersrand

- 2014 -present; external supervisor, PhD Mt. Kenya University, Kenya
- 2014 Supervisor Masters program University of Witwatersrand
- 2011- Present. Committee Member CARMS , Strathmore university
- 2015- Proposal reviewer, CEMASTEAM

5.0 FELLOWSHIP

- 1998: **JICA** Fellowship, Hiroshima University Japan
- 2010: **HED** Grant proposal writing, Syracuse University, USA
- 2012: **HED/USAID** Scholar exchange program, SU-KU project , USA
- 2012 : **Linnaeus Palmer** Grant, Scholar exchange KU-LU link Sweden
- 2013-2014 :**NRF/Marang Centre** for science and mathematics Education, Post Doctoral fellowship, University of Witwatersrand. South Africa
- 2014 **HP/ ISTE grant**, World education Forum, London, UK

6.0 POSTGRADUATE SUPERVISION

6.1 *PhD Supervision*

6.1.1 COMPLETED

2011-2014: Arthur , Benjamin Eduafo, E83F/23814/2011; Effects of a Problem Solving Approach on Distance Learners Achievement in Mathematics: A case Study of University of Cape Coast, Ghana.. Graduated, December 2014

2012-2014. Benson Njoroge Wanjiru. E83/22266/2010; Exploring the Effects of Mathematical Vocabulary Instruction on Mathematics Achievement. A case study of Kiaguthu Boys, Murang'a County, Kenya. (successful defense of dissertation, 2014)

6.1.2 ONGOING PhD SUPERVISION.@. October 2015

- ◆ **2012: Mukiri Irene Mwingirwa, E83/21795/2012:**Use of Geogebra to support conceptual teaching and Learning of secondary School mathematics (*submitted thesis*)
- ◆ **2013 . Kim Ramatlapana** prospective teachers’ technological pedagogical content knowledge constructed in a Geogebra-based environment. **University of Wits. report writing**
- ◆ **2013. Bala Husseini E83F/26544/2013.** Code Switching and Academic Achievement among secondary school students in mathematics in Adamawa State-Nigeria (*Report writing*)
- ◆ **2013: Geteregechi Joash Mochogi: E83/24616/2013.** Problem-Based Instruction and Mathematics achievement among secondary school students of Nyamira County, Kenya. **Data collection**
- ◆ **2014: Dogo Peter E83F/28974/2013** Teaching and Learning Mathematics in English as a second Language and Its Impacts on Mathematical Modelling at Junior Secondary School Level In Nigeria (Bauchi State). *Data collection*
- ◆ **2015- Gakinya Kigamba John (PhDEd/2014/58006)** Teaching Mathematics Through Problem-Solving, A Study Of Secondary School Level Performance In Murang’a County, Kenya. (*proposal writing*)

6.2 MASTERS SUPERVISION

6.2.1 COMPLETED

- ✚ **2010. Samuel Atonga E55/KUB/11596/2007;** Factors affecting Mathematics Performance in KS2: A case study of Braeside School, Nairobi
- ✚ **2012 Owiti Peter Richard E55/CE/11276/2007.** Effectiveness of teachers initiatives for improving the performance of girls in Mathematics in Secondary Schools in Nakuru Municipality.

- ✚ **2013. Monyoro Wilfred Mogire E55/CE/10696/2008.** Factors inhibiting Implementation of Using Computers in Mathematics Classrooms I Secondary schools, Kisii County, Kenya
- ✚ **2013 Geteregechi Joash Mochogi, E55/12568/2009.** Difficulties Experienced by Students in Learning Algebra in selected secondary schools of Ekerenyo Division, Kisii North District, Kenya
- ✚ **2013 Makeo Evans Mwajuma E55/ CE/11992/2007.** Factors affecting performance in mathematics performance in Tana River District
- ✚ **2013 Njagi Lydia Igandu E55/CE/15616/2008.** Factors affecting performance in Mathematics in Embu District ..
- ✚ **2014. Maina Arege Peter E55/Ce/14074/2009.** Factors Influencing K.C.S.E performance in Mathematics Among Secondary School Students In Borabu District, Nyamira County, Kenya.
- ✚ **2012 Katua John Muthoka E42/CE/11790/2007** , PGDE project . Factors influencing mathematics performance in KCSE examinations in Mbooni District
- ✚ **Musyimi Dorcas Ndinda E55/Ce/13187/2009** *Successful defense of thesis*
- ✚ **Wafula Wanjala E55/Ce/1500/2008** *Thesis Bound ready for graduation*
- ✚ Nickson Tsofa Mweni . E55/Ce/24575/2012 submitted thesis
- ✚ Mwangi Peter Gachoka: E55/ Ce/ 25872/ 2011, submitted thesis
- ✚ Mr. Lang'at Ernest Kiprono Lawrence. E55/Ce/20649/2012 *Proposal Writing*
- ✚ Daniel Momanyi Bundi, E55/Ce/24574/2012. Report writing
- ✚ Rotich Kiplangat Kennedy. E55/Ce/20656/2012, report writing
- ✚ Zachary Abuga E55/Ce/24577/2012 report writing
- ✚ Kamau Mary Wambui. E55/Ce/13462/09. *Writing Report*
- ✚ Nancy Gaceri K E55/Ce/20648/2012 *Report Writing*
- ✚ Mwangi Festus Gakuo, E55/Ce/24596/2012 *Proposal Writing*
- ✚ Gikandi Anthony Muchiri E55/Ce/21907/2012 *Proposal Development*
- ✚ Fridah Masese Ogeto. Reg.No. E55/Ce/21155/2012. *Submitted Thesis*
- ✚ Maringa John Kariri, E55/Ce/20090/2012. *Submitted Proposal*
- ✚ Sheila Oyeila Amuko, E55/20091/2012. *Successful defense*

✚ 12 more proposal writing.....

7.0 CONFERENCE/SEMINARS/WORKSHOPS

7.1 Participation in Workshops / Conferences

- Participated workshop on Integration of technology at KUCC (Jan, 2013)
- Participated in Seminar on Technology Integration at the National ICT Innovation and Integration Centre (June 2013)
- Facilitated the HP catalyst workshops for Practicing teachers; September 2011, February 2012, July 2012, September 2013 at Kenyatta University
- Facilitated: HP catalyst workshops for Kenyatta University Preservice teachers; September 2011; March 2012, May 2012 at Kenyatta University
- Participated in the AU summit Conference “ Africa Education, Second Decade and Beyond; Dares-salaam, Tanzania , September 2010
- Participated in the department Workshop on Curriculum review, KUCC, July 2011
- Participated in Moodle writing workshop, KUCC, October 2011
- Participated ; Workshop for developing the School of Education Strategic plan, June 2012
- Facilitated in Strathmore University Preconference workshops on Mathematics Education, June 2011. June 2012, August 2014, August 2015 CARMS)
- Participated in Kenyatta University grant proposal writing workshop; 2010 at Utalli Hotel.
- Participated in The Pan African Mathematics Olympiad planning workshop, University of Nairobi
- Participated in STEM+ WEBINARS on ; E -scapes and Learning, October 2011; Using Technology to teach STEM subjects; November 2011
- Participated in the University academic audit retreat for Kenyatta University, Nanyuki, Kenya, 2013

- Participated in the African Population and Health Research Centre (APHRC) workshop on Literacy and Numeracy assessment tools development for grades 1, 2, & #, an AKF initiative, Nairobi, grand Regency
- Attended WSoE Marang Centre for mathematics and Science education division , seminar on mathematics curriculum for the changing learner .. November 2013, University of Wits, SA
- Participated in the WSoE, seminar on use of Instrumentation conceptual framework to determine students response to science concepts December, 2013, University of Wits,SA
- Participated in Research School seminar at the technical University Bloemfontein, SA June 2014
- Participated in writing workshops, Education and Research centre, University of Wits, SA, July 2014
- Attended the SAARMSTE Conference at the Nelson Mandela Metropolitan University of Technology, Port Elizabeth, SA (January 2014)
- Participated in the Journal Article Writing Workshop for PhD Students in the Faculty of Humanities (March 2014
- Participated in World education forum, London, Jan 2014
- 2015 Facilitated department seminar (“ Mathematics in historic environment”
- Presented a seminar paper on Kenyan experience in mathematics teachr preparation
- Presented a paper in Dundalk, Ireland on mathematics in Historic environment a mathematics pedagogy
- July 2015 Facilitated HP exhibition on teachers integration of technology in STEM subjects
- Local organizing committee on international conference on Mathematics, Strathmore University
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7.2 Presentation of Papers at Academic and Professional Conferences

- Miheso-O'Connor June 2012). Using Technology to support Conceptual teaching and Learning of STEM subjects. International Society for Technology in Education (ISTE). San Diego USA
- Miheso- O'Connor, J. Maundu (April 2012) . Hp Catalyst Initiative in Kenya ; Challenges and Opportunities. Hp Summit Beijing China.
- Miheso- O'Connor, M. Kiio, & M. Nasibi (Sept.2012), Mathematics in Historical Environment, The case of Kenya. Linnaeus University, Sweden
- Miheso-O'Connor & J. Masingila (Nov 2012). Using Technology to support STEM Learning. Lessons from Kenyan Classrooms. PME-NA Conference, Michigan USA
- Miheso-O'Connor (July 2012) The role of Technology in Learning mathematics, Kenyatta University HP catalyst Initiative Lessons. 2nd International Conference on mathematics and Mathematics Education. Strathmore University, Nairobi, Kenya
- Miheso- O'Connor (July 2012) Integration of technology in Learning STEM subjects, 2nd ICE conference, Kenyatta University, Nairobi
- Miheso- O'Connor (July 2011) Pedagogical content knowledge for teaching mathematics, Kenyan case, First International Conference on mathematics and Mathematics Education, Strathmore University, Nairobi, Kenya.
- Miheso-O'Connor (Nov. 2011), Socio Cultural aspects of mathematics Education, International conference of Mathematics instruction, Hiroshima, Japan.
 - Miheso- O'Connor, M. Ochanji (May 2011) Using technology to support conceptual learning of mathematics and Science, Delhi HP/ISTE Summit, New Delhi, India.
 - Miheso O'Connor, J. Masingila, N. Twoli, D, Khatete & J. Maundu (Nov 2011) Using technology for STEM learning; Pedagogy 3.0 Consortia WEBINAR, SLOAN

– C Consortia. YouTube/Hpcatalystinitiative/Kenyatta university: [http://:Cuse in Kenya.com](http://Cuse in Kenya.com)

- Miheso- O'Connor, J. Masingila (2010) . Teacher Proficiency in mathematics Knowledge for teaching. 3rd Africa regional Congress of International Commission on mathematics Instruction (AFRICME3) Gaborone, Botswana
- Miheso- O'Connor (2010) New Trends in mathematics Education, AU Summit on Education, Pretoria, SA
- Miheso- O'Connor , M.K.(2009) Mathematics Education and emerging trends in Kenya. First AU Pan African Conference on Curriculum, Literacy and Book sector development. Dar es salaam, TZ
- Miheso O'Connor K.M : Beyond Gender Equity, Millennium Goal conference, Monetary Studies Institute, Kenya,
- Miheso – O'Connor, K.M, C. Mwathi, & J. Owino : .Mathematics Education in Kenya, ICMI, Johannesburg .SA
- Miheso-O'Connor, M.K. : . Higher Order Learning and interactive learning, ICMI, SA
- Miheso- O'Connor, M.K (Nov.2013). The role of technology in transforming teacher education in Kenya, WSoE, Marang centre for mathematics and Science Education Division talk, Johannesburg, SA.
- Miheso- O'Connor²& Benson Wanjiru¹ (2015) Effects of Mathematical Vocabulary Instruction on Students' Achievement in Mathematics in Secondary Schools of Murang'a county

7.3 Convening and Coordinating Conferences

- ICE conferences, (2011, 2013, 2015) International conference on Education, member of Planning committee, Kenyatta University
- Centre for Applied Research in Mathematical Sciences (CARMS) conferences,(2011, 2013, 2015 international conference on mathematics and Mathematics Education. Planning committee, Strathmore University
- ISTE/HP Summit, 2012, Member of Planning committee. International Society for Technology in Education, Beijing Summit, China
- PAMO (Pan. African mathematics Olympiad. Coordinator and member of organizing committee for the Pan African mathematics Olympiad congress, KIE, Kenya
- AFRICME (2007) Member of Convening committee, The international Congress on Mathematics Instruction, CUE
- Coordinator (2013). Induction course for new staff members, Kenyatta University
- Facilitator (2013) Pedagogical strategies training course, Kenyatta university academic staff.
- Facilitator, (2015 June ; Department Seminar, ” Mathematics in Historic environments” COMTECH, school of Education
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8.0 RESEARCH AND PUBLICATIONS

8.1 Articles in refereed Journals

Marguerite Miheso-O'Connor Khakasa, PhD, Margot Berger (2014)

Status of Teachers' Proficiency In Mathematical Knowledge For Teaching At Secondary School Level In Kenya

International Journal of Science and Mathematics Education; Manuscript Number: IJMA-D-14-00145R1 Springer April 2015

Margot Berger PhD, & Miheso-O'Connor (2014)

Learner's use of a Mathematics Textbook: An exploration

Educational Studies in Mathematics ; Manuscript Number: EDUC-D-14-00285 (in Press)

- ✚ **Miheso- O’Connor, M.K 2011.** Proficiency in Pedagogical content knowledge for teaching Mathematics, *LAP LARMEC, Academic Publications*
- ✚ **Miheso –O’Connor (2010).** Socio Cultural aspects in mathematics Education, lesson from Kenya. , *Journal of Research and Practice of International Cooperation in Science, Mathematics and Technology Education (SMATEC), Hiroshima University.*
- ✚ **Miheso- O’Connor, M.K 2006,** Higher Order thinking skills and interactive learning *Journal of Education services (JES), Kenyatta university*
- ✚ **Miheso- O’Connor, M.K, C. Mwathi & J. Owino (2005).** Mathematics Education in Kenya, *ICMI Journal USA*
- ✚ **Benson Wanjiru& Miheso-O’Connor, M.K (2015):** Effects of Mathematical vocabulary Instruction on Students’ Achievement in Mathematics in Secondary Schools of Murang’a County, Kenya ; *Journal of Education and Practise, vol.6, no.18 .2015 - Online*
- ✚ **Mukiri I.M., Miheso- O’Connor, M.K. & Khatete, D (2015).** Teachers’ Perspectives towards use of Technology , the case of Geogebra in teaching Mathematics in Kenya. *Scientific Research journal (SCIRJ) Vol.111 issue ix, Sept. 2015*
- ✚ **Amuko, S., Miheso, M.K& Ndetheu, S. (2015)** Opportunities and Challenges: integration of ICT in Teaching and learning Mathematics in Secondary Schools , Nairobi, Kenya. *Journal of Education and Practise Vol 6, no. 24 2015*

8.2 Articles in Conference Proceedings

- Miheso-O'Connor, M.K. & J.O. Masingila; Teacher Proficiency in Pedagogical content knowledge, Botswana, AFRICME proceedings, 2010
- Miheso-O'Connor, M.K. & J.O. Masingila; (2012) Integrating Technology to support conceptual teaching and learning, lessons from Kenya. PME-NA, Michigan USA Conference Proceedings
- Technology and pedagogical content knowledge, the Kenyan case, Lesotho AFRICME 2013 proceedings.
- Benjamin E. Arthur, Marguerite Miheso-O'Connor, Simon M. Rukangu, Joanna O. Masingila, (2013). Effects Of A Problem-Solving Approach On Cognitive Levels of Performance Of Prospective Teachers In Mathematics: A Case Study Of Ghana's University Of Cape Coast : ICE: 2013 Proceedings
- Miheso-O'Connor, J. Masingila, N. Twoli, D Khatete, M. Ochanji, J. Maundu (2011) Integrating Technology in STEM learning. Lessons from Kenya ICE 2 Proceedings
- Miheso-O'Connor (2014). Integration of Technology uptake and teaching practice. The HP Catalyst initiative, the case of Kenya; Education world Forum, 2014 Proceedings
- Miheso-O'Connor, M.K (2013). Integrating Technology to support teaching and learning of STEM subjects, ISTE annual meeting proceedings, San Diego, USA
- 6 articles in ICE proceedings of 2015 : Check Link <http://cuseinkenya.syr.edu/https://mail.google.com/mail/u/0/?ui=2&ik=ed903f3348&view=att&th=1503a458dcae9cbd&attid=0.1&disp=inline&safe=1&zw>

8.3 Books and Book Chapters

- Miheso-O'Connor M.K Proficiency in Pedagogical content knowledge for teaching mathematics. Secondary school mathematics teachers' interpretations of Students problem solving strategies IN Kenya, LAP Lambert Academic Publications (2011) (e-book)
- Miheso-O'Connor, M.K Mathematics Methods Handbook for Open learning students OLI, Kenyatta University (1st ed.2006, 3rd edition, 2011)

- Miheso- O'Connor, M.K. & J.P O'Connor; Revision Mathematics for secondary schools, Oxford University Press
- Miheso – O'Connor, M.K. & J.P. O'Connor, Mathematics revision for Upper Primary , Longman, Kenya
- Miheso O'Connor, (2011) Mathematics Curriculum for teacher training college; Kigali Institute of Education Kigali
- Miheso- O'Connor, (Ed.) (2013) South Sudan Unified Curriculum for teacher Education- Mathematics; MoGEI, South Sudan
- Miheso – O'Connor& M. Ochanji (2011): 2011 HP grantee Project showcase, New Delhi, India (www.hp.com/hpinfo/grants/)
- Miheso-O'Connor (2006) The Role of African Universities in attainment of the Millennium Development Goal '*Beyond Gender Equality*', Kenyatta University ISBN 9966-776-05-2
- Miheso- O'Connor et.al Integrating technology for secondary school mathematics and science, lessons from HED project, 2011-2014 in Capacity building for teacher preparation ... in Print
- Miheso – O'Connor et.al . Managing large classes In Capacity building for teacher preparation.. in print
- Youtube Film caption (2013)on HP catalyst initiative: Using video cameras for teaching mathematics and Science in Kenya link <http://youtu.be/23hQWmKrQLk>

9.0 NETWORKING AND COLLABORATION WITH EXTERNAL ORGANIZATIONS

- 2009 : African Population and health Research, developing assessment tools for grades, 1,2, &3 (AKF)
- 2007-present. Vice Chair, Mathematics association of Kenya an affiliate of International mathematics Union (IMU).
- 2012- present Member of international Society of Technology in Education (ISTE)
- 2010-2014 member of HP pedagogy 3.0 Consortia on Integrating technology in Education

- 2013 present: collaboration with Palmers foundation, Linnaeus University, Sweden , Kalmar museum, Kenyan museum for international time travel Project
- 2007 – present, Collaboration with HED (higher education department , USAID and Syracuse university Research and exchange of programs
- 2010- Present ; International development office, Hiroshima University, Japan
- 2010- Present, Honorary staff member , Syracuse University, USA
- 2011- present Member of AU teacher education Consultative committee
- 2011- Present Member KU- NI3C collaborative committee
- Alumni ; University of Hiroshima Japan
- Alumni University of the Witwatersrand, South Africa
- HP Research team Kenyatta university- Masinde Muliro University, Kakamega
- Collaboration technology education with Bristol University, UK
- Canada Education Services, (CES) Kenya Chapter
- Centre for Applied research in mathematical Sciences (CARMS), Strathmore University, Nairobi
- Research consultant: CEMASTEAM (2015)
- Research Consultant EFA secretariat “ use of contract teachers “ (2015)

10.0 EXTERNAL AND INTERNAL GRANTS

- 2005; Kenyatta university , SoE research grant, KSh. 100,000
- 2010 HP catalyst Initiative award \$ 150,000 (KSh. 1.2 Million
- 2010 HED/ USAID Proposal writing grant, \$ 500,000
- 2010 HED/USAID Research grant \$ 1 million (Ksh. 81 million
- 2012 ISTE HP leadership Award \$ 100,000 (Ksh.8.2 million)
- 2012 Linnaeus Palmer Scholar award Ksh. 150,000
- 2013 Marang centre for science and mathematics education (NRF), R.154,000 (KSh.1.3 Million)
- 2014/2015 Linnaeus Palmer Scholar award Ksh. 1million
- 2014: ISTE Global Education Forum support grant \$ 5000

11.0 LOCAL REGIONAL &INTERNATIONAL APPOINTMENTS

11.1 External examiner in Other Universities

- PhD Supervisor, University of Witwatersrand, SA
- Master of mathematics Education Supervisor, University of the Witwatersrand
- MPhil Dissertation examiner, Braeburn, College, Nairobi
- External Program advisor, Kigali institute of education, Rwanda
- Reviewer for SMATEC IDEC Journal, Hiroshima
- STG Member of ISTE
- Member of international learning Metrics' assessment exploration team,
- Member of the Bridging age international
- Member of FAWE – Kenya Chapter

11.2 Being invited to a conference as a guest speaker

- 2011. Guest speaker: Strathmore 1st conference on mathematics and mathematics education
- 2011, Guest speaker: Hiroshima University on Socio-Cultural aspects on mathematics education
- 2013 guest speaker, St Josephs secondary school, Mangu, Kiambu
- 2013 Guest speaker Centre for Mathematics, Science and Technology in Africa (CEMASTE A)

11.3 Appointment on Boards and Ad hoc Committees

- 2007-2014 Board member; Regional centre for capacity development (RECCADE)
- 2013- Present Board member, Centre for Teaching Evaluation and Excellence (CTEE)
- 2013: Member or academic audit ad hoc committee
- 2013 : Member of Post graduate committee School of Education
- Appointed Student mentor

12.0 AWARDS /RECOGNITION

- 2012; Kenyatta university contract performance return effort
- 2013/2014: Post Doctoral fellowship, University of Witwatersrand
- 2012: Scholar exchange award, Linnaeus University Sweden
- 2012: Scholar exchange award, Syracuse University, USA
- 2012 : HP/ISTE Leadership award
- 2014 ; Global Education Forum Award, London

13.0 COMMUNITY OUTREACH

- 2006-2010 : Member Kitengela community professional Women's self society
- 2010- Present: Member Kakamega- County professional caucus, Nairobi Chapter
- 2012: patron : Mugango Village agricultural initiative
- 2012- Present. Member Canada Education services (CES) , Kenya Chapter
- 2004- Present; Motivation speaker for mathematics Education in schools (Teachers and Students)
- Chief Guest CEMASTEIA Third country training workshops

14.0 ACADEMIC LEADERSHIP

- Developed the Mathematics Methods course program for undergraduates **ECT 302**
- Reviewed mathematics Education program for Masters of education M,Ed 9 ECT 532 (832); ECT 533 (ECT 833); ECT 534 (ECT 834) ; ECT 531 (ECT 831)
- Developed Mathematics education program for Post graduate diploma ECT/PG/22
- Developed a popular open learning module for teaching mathematics education to preservice teachers
- Developed a training program for integrating technology teaching STEM subject for both pre service and in-service teachers
- Developed Mathematics mentoring program for Braeburn – Ku MPhil program
- Developed Computer science course for Braeburn Mphil Course

- Developed Mathematics course for KU- KENSIP program
- Developed mathematics education course for the directorate of teacher professional development, Kenyatta University

14.2 Developing programs external to Kenyatta University

- Developed learning module for mathematics education for Kigali institute of education, Rwanda
- Reviewed and developed mathematics curriculum for the South Sudan Unified curriculum for teacher education
- Developing assessment tools for grades 12&3 AKF
- Development learning Matrics, Brooklyn education NY

14.3 Initiating / Leading Research Project

- 2010- present. PI HP project. Using Technology to Support The Conceptual teaching and learning of Science and mathematics at secondary school , Kenya
- 2011- Present: PI mathematics education in Historical environment , time travels project
- 2011:Initiated HED/ USAID project on capacity Building for teacher preparation project 2011-2014
- Lead researcher Female in research Science and technology (FIRST) directory initiative
- Proposal writing for research funding: large classroom, technology integration,

15.0 OTHERS

15.1 Appointments

- National Vice chair; mathematics Association of Kenya (MAK)
- Panelist KNEC Diploma program
- Regional External programs advisor, Kigali Institute of Technology (KIE) Rwanda
- SIG member of International society for technology in Education (ISTE)
- Member : learning metrics consultancy international

- Member of AU teacher education implementation consultative desk

15.2 Contributing to University advancement

- Hp catalyst initiative award: Equipment and training
- Global visibility through conferences,
- Exhibitions
- Brochures. Summit presentation.
- YouTube uploads, Webinars
- Video clips on Google sites
- Blogs such as Cuse in Kenya
- Face book page on HP in Kenyatta University
- Inclusion of Kenyatta university HP initiatives in international book
- Linking with high school teachers and ministry of education, Kenya
- Presentation of Kenyatta University at the Global Education Forum, London 2014

15.3 Membership to Professional bodies

- Kakamega county professional caucus
- Mathematics Association of Kenya
- Member of organizing committee for the Centre for applied research in mathematical sciences
- Member of CES- Kenya
- NARCOSTI Reviewer
- Bridging Ages Member