## CURRICULUM VITAE DR. CATHERINE MUHONJA AURAH



## DR. CATHERINE MUHONJA AURAH

Masinde Muliro University of Science and Technology P.O. Box 190-50100 Kakamega, Kenya +254724966574 (Cell), Email: cataurah@yahoo.com

- Life philosophy I believe in self-knowledge, for if we know what we feel it means that we can connect with others from a basis of respect and humility rather than fear, and link with those who feel differently.
- Teaching Philosophy Teaching provides an opportunity for continual learning and growth. One of my hopes as a science educator is to instill a love of learning in my students, as I share my own passion for learning with them. I strive to help my students to build their metacognitive abilities so as to be self-regulated learners. In our competitive society it is important for students to not only receive a solid education, but to work with someone who is aware of and sensitive to their individual needs. I am such a person and will always strive to be the best science educator that I can be.

Overall, I am interested in the bigger picture of how to bring about a paradigm shift in learning and teaching of science at high school and college levels

## **EDUCATION**

2013	Doctor of Education; Science Education Ball State University, Muncie, 47304 IN, USA				
	Dissertation: The Influence of self efficacy and Metacognitive Prompting on Genetics Problem Solving Ability among High School Students in Kenya.				
2012	MSC. Environmental Education				
	Masinde Muliro University of Science and Technology				
	Thesis: Assessment of Extent of Plastic Bag Waste Management Methods Used in				
	Nairobi City Promote Sustainability				
2010	MA. Educational Psychology				
	Ball State University, Muncie, IN, USA				
2006	BED. Science (Mathematics and Biology)				
	Moi University				
1986	Diploma in Science Education (Mathematics and Biology)				
	Kenya Science Teachers College				

#### **RESEARCH INTEREST**

My research interests revolve around science education in the following areas:

- Problem solving
- Psychosocial Factors in Learning Science: Self-efficacy; metacognition, Motivation; Attitude
- Self-regulated learning in science

- Pre-Service Teacher Professional development- Exploring self-efficacy and metacognitive abilities of pre-service teachers
- ICT Use in STEM Teaching and Learning
- Gender Disparity in STEM education

## **ONGOING RESEARCH PROJECTS**

- Gender Parity in STEM education in Kenya (GEPSTEMIK): Pedagogical Integration of Technology to ensure quality, equity, resilience and Sustainability in STEM education during and Post-covid-19 pandemic: A grant Proposal: **Principal Investigator (SUBMITTED).**
- ICT Integration in Teaching and Learning STEM Subjects at High School in Kenya: PROJECT IMPACT: A grant proposal: **Researcher**
- Gender Parity in STEM in Kenya: Propelling the Kenyan Girl to Propel in STEM education: A grant Proposal: **Principal Investigator.**
- STEM Education Capacity Building in Kenya: A Collaborative and Participatory Action Research Initiative Between ... High schools and Universities: A grant Proposal: **Investigator.**

#### **TEACHING EXPERIENCE**

Senior Lecturer, Department of Science and October, 2018- to date Mathematics Education, MMUST June.2013 - October. 2018 Lecturer. Department of Science and Mathematics Education, MMUST Jan, 2011 – May, 2013 Teaching Assistant: Ball State University, USA August 2009 - Jan 2011 Graduate Assistant: Ball State University, USA July 2007 – August 2009 Graduate Assistant, Masinde Muliro University 1986- June, 2007 Teacher of Biology and Mathematics at Secondary School **ADMINISTRATIVE ROLES** Director, International Relations and Academic May,2017 - to-date Linkages

22<sup>nd</sup> October to 6<sup>th</sup> November, 2018 February, 2015 – May, 2017 Acting Deputy Vice Chancellor, (PRI) Chairperson, Department of Science and Mathematics Education

#### SCHOLARLY PUBLICATIONS

- Mukagihana, J., Nsanganwimana, F. and Aurah, C. (2021), "Resource-Based Instruction Data Collected from 2 Higher Learning Institutions in Rwanda", *Mendeley Data*, V1, doi: 10.17632/bpfb5sdmyg.1
- Mukagihana, J.<sup>1</sup>, Nsanganwimana,F.<sup>2</sup>, Aurah, C.M.<sup>3</sup>, (2020). Biology Instructional Resources Availability and Extent of their Utilization in Teaching Pre-Service Biology *Teachers African Journal of Educational Studies in Mathematics and Sciences* Vol. 16, No. 2, 2020 http://creativecommons.org/licenses/by-nc-nd/4.0. DOI: https://dx.doi.org/10.4314/ajesms.v16i.2.3
- Masinde J. W., Aurah, C., and Wanjala, M. (2020). Effect of Software-Oriented Concept Mapping On Kenyan Students' Achievement in Electrochemistry. *International Journal of Education and Social Science Research*. ISSN 2581-5148
- 4. Mulavu W.G., and Aurah, C., (2019). Motivation as a predictor of Science Academic Achievement among Secondary School Chemistry Students' in Vihiga County, Kenya. International Journal of Development Research 9(10) 30216-30220
- Wesonga, F & Aurah, C. (2019): Influence Of Teachers' Instructional Strategies And Students' Learning Styles On Academic Achievement In Kenyan High School Physics. European Journal of Education Studies Vol. 6 (8)

- Nanyama E.Mabele, Bota N. Kennedy & Aurah M. Catherine (2019). Inclusive Education in Kenya: Within Kenyan Elementary Schools and teacher preparedness. International journal of social Sciences and Humanities Research Vol 7, Issue 3 pp( 442-454)
- Nanyama E. Mabele, Bota N. Kennedy & Aurah C. Muhonja (2019). Teaching strategies, learning Journal of Modern Education Vol 1: Issue 2pp(28-48).
- 8. Wesonga, F. M & Aurah, C.M.(2019): Instructional Strategies and Learning Styles as Predictors of High School students' Academic Performance in Physics Practicals in Kenya. Proceeding of the 2<sup>nd</sup> International Conference on Future of Education, Vol. 2, Issue 1,2019, pp. 1-11Copyright © 2019 TIIKM ISSN 2630-7413 onlineDOI: https://doi.org/10.17501/26307413.2019.2101
- Mwelese J., Aurah, C.,& Wanjala, M.,(2018).Teachers' Attitude toward Mathematics Classroom Discourse in Secondary Schools in Vihiga County, Kenya. *International Journal of Scientific Research and Management (IJSRM)*. Volume 06 Issue 09. Pages M-2018-97-110 Website: www.ijsrm.in ISSN (e): 2321-3418 Index Copernicus value (2015): 57.47, (2016):93.67, DOI: 10.18535/ijsrm/v6i9.m02
- Mwelese, J., Wanjala, M.S.M., & Aurah, C. M. (2018). Strategies Employed by Mathematics Teachers in Engaging Students in Classroom Discourse. *Journal Of Education & Entrepreneurship* ISSN: 2636-4794 (Print), ISSN: 2636-4778 (Online) Vol. 5, N0.3, 90-103; 2018. https://doi.org/10.26762/jee.2018.400024
- 11. Masinde, J.W., **Aurah, C.M.,** & Wanjala, M.S.M. (2018). The Effect of Software-Oriented Concept Mapping on Kenyan Students' Achievement in Electrochemistry. *Journal of* Arts, *Humanities and Social Sciences*.
- 12. Nanyama Elizabeth Mabele, Achoka, JSK& Aurah Catherine Muhonja (2017). Stakeholders Strategies to Combat Teenage Mothers pregnancies in Basic Education Cycle in Kenya. Global Journal of research and social Sciences. Vol. 22, Issue 1 ISSN: 2279-0845.
- Sirima N.L. & Aurah, C.M. (2017). Family Type and Participation of Pupils' in Special Units in Public Primary Schools in Kakamega County, Kenya. *IOSR Journal of Research & Method in Education (IOSR-JRME) e-ISSN: 2320–7388,p-ISSN: 2320–737X Volume 7, Issue 4 Ver. III Jul - Aug 2017), PP 81-87 www.iosrjournals.org*
- 14. Naibei, E. C. Shikuku, B. N. & Aurah. C. M. (2017). Mathematics Teacher's Preparedness and Their Effect on Learner Acquisition of Basic Operational Skills in Kakamega Central Primary Schools, Kenya. Journal of Education, Society and Behavioural Science. 22(1): 1-7, 2017; Article no.JESBS.35369
- 15. Aurah, C. M. (2017). Investigating the Relationship between Science Self-efficacy Beliefs, Gender, and Academic Achievement, among High School Students in Kenya. *Journal of Education and Practice*, ISSN (Paper)2222-1735 ISSN (Online)2222-288X
- 16. Audi O., Sika, J., & Aurah, C. M. (2016). Assessment of Achievements in Adult Literacy Programme in Vihiga County, Kenya. *Greener Journal of Educational Research*. ISSN: 2276-7789 ICV: 6.05.i
   DOI: http://doi.org/10.15580/GJER.2016.5.072716125
- 17. Kwalia C.K., Aurah C. & Amadalo M. (2016). Composite Instructional Method and Its Effect on Secondary School Students' Academic Achievement in Fluid Flow Physics in Mt

Elgon Sub-county, Kenya. American Journal of Educational Research, 2016, Vol. 4, No. 13, 943-947

- 18. Nabie A. & Aurah C. (2016). Integrating National and International Security Education into the School Curriculum, Western Region. *Journal of Education and Social Sciences. Issue 3, Vol.1*
- Wanjala, M.S., Aurah, C. M., & Koros C. S.(2015). Pedagogical Factors Affecting Integration of Computers in Mathematics Instruction in Secondary Schools in Kenya. *Journal of Education and Practice* (In Press)ISSN (Paper)2222-1735 ISSN (Online)2222-288X.
- 20. Ouko, S., Aurah, C., & Amadalo, M. (2015). Peer Instruction and Secondary School Students Achievement in Vectors. *Journal of Education and Practice* Vol.6, No.27. ISSN 2222-1735 (Paper) ISSN 2222-288X (Online)
- 21. Ouko, S. A., & Aurah, C. (2015). Peer Instruction and Secondary School Students Attitudes Towards Vectors in Bungoma County; Kenya International Journal of Advanced Research. Volume 3, Issue 10, 670 - 673. ISSN 2320- 5407http://www.journalijar.com
- 22. Aurah, C. M; Cassady, J.C.; & McConnell, T. J. (2014). Genetics problem solving in high school testing in Kenya: Effects of metacognitive prompting during testing. *Electronic Journal of Science Education* Vol. 18, No. 8 (2014)
- 23. Ong'unya R.O., Aurah,C.M., Nabwire, J.L., & Songok,J.R. (2014). The Plastic Waste Menace in Kenya:, A Nairobi City Situation. *International Journal of Current Research Vol. 6, Issue, 04, pp.6175-6179.*
- Aurah, C. M. (2014). Exploring the Academic Experiences Of African International Graduate Students in a Midwestern University In United States of America: A Study. *African Educational Research Journal* Volume (2)1 35-42
- 25. Aurah, C. M., Cassady,J. C., & McConnell, T.J. (2014). Predicting Problem Solving Ability From Metacognition and Self-Efficacy Beliefs on a Cross Validated Sample. *British Journal of Education* Vol.2.No.1, pp. 49-72. Published by European Centre for Research Training and Development UK (www.ea-journals.org)
- 26. Aurah, C. M., & Mcconnell, T.J. (2014). "Comparative Study On Pre-Service Science Self-Efficacy Beliefs Of Teaching In Kenya And The United States of USA." *American Journal Of Educational Research* 2.4. 233-239.
- 27. Aurah, C. M. (2013). The Influence of Self-Efficacy Beliefs and Metacognitive Prompting on Genetics Problem Solving Ability among High School Students in Kenya. ProQuest Dissertations And Theses; Thesis (Ed.D.)--Ball State University, 2013.; Publication Number: AAT 3561709; ISBN: 9781303089442; Source: Dissertation Abstracts. International, Vol: 74-09(E), Section: A.; 247 p.
- 28. Aurah, C. M., (2013). Assessment of Extent to which Plastic Bag Waste management Methods Used in Nairobi City Promote Sustainability. American Journal of Environmental Protection. 1 (4) 96-101. doi: 10.1269/env-1-4-4
- 29. Aurah, C. M., (2013). The Effects of Self-efficacy Beliefs and Metacognition on Academic Performance: A Mixed Method Study. *American Journal of Educational Research*. 1(8), 334-343. doi: 10.12691/education-1-8-11
- 30. Aurah, CM, Koloi-Keaikitse, S, Isaacs, C, Finch, H, (2011). The Role of in Everyday Problem Solving Among Primary Students In Kenya. *Problems of Education in the 21st Century*. 30 (1) 9-21 http://journals.indexcopernicus.com/abstracted.php?level=5&icid=943466

### SERVICE TO THE FIELD OF EDUCATION

#### a. Proposal and Thesis Supervision

# <u>GRADUATED</u>

# MASTERS

- Kwalia Cornelius Kibet (2014). Composite Instructional Method And Its Effect On Secondary School Students' Academic Achievement In Fluid Flow Physics In Mt. Elgon Sub-County, Kenya (GRADUATED: DEC. 2016)
- Lornah Sirma: PhD Thesis entitled: Home Based Factors Affecting Participation of Pupils in Special Units in Public Primary Schools In Kakamega County, Kenya (GRADUATED, 2017)
- Peter Kelonye Sogoni (2015/16). MSC. Thesis Entitled: "Secondary School Students' Perfomance in Kinematics Using Cooperative Learning in Sabatia Sub- County, Kenya"(GRADUATED DEC 2017)

## <u>PhD</u>

- 1. Susan Ouko: PhD Thesis entitled: Peer Instruction and Secondary School Students' Performance in Vectors (GRADUATED, DEC 2016)
- Masinde Joseph Wangila (2016). Phd Proposal Entitled: "Software-Oriented Concept Mapping: A Metacognitive Strategy In Students' Learning of Electrochemistry Among Secondary Schools in Kakamega County, Kenya (Graduated in December, 2018)
- 3. Mwelese Jackson : Influence Of Teacher Related Factors In Dialogic Instruction And Its Promotion Of Mathematics Classroom Discourse in Secondary Schools In Vihiga County, Kenya (**Graduated in December, 2018**)
- Mulavu Wycliffe (2019). Effects Of Multiple Instructional Approaches On Secondary School Students' Learning Outcomes In Chemistry In Vihiga County, Kenya (Graduated in December, 2019)
- Elizabeth Nanyama : PhD. Thesis Entitled: Effectiveness in Implementing Inclusive Education Policy on Learners' Academic Achievement in Inclusive Public Primary Schools in Kakamega County, Kenya (Graduated in December, 2019)
- 6. Wesonga Fanuel: PhD Thesis Entitled: Influence Of Teachers' Instructional Strategies And Students' Learning Styles On Performance Of Physics Practicals In Navakholo Sub-County, Kenya (Graduated: December, 2020)

# TO GRADUATE

- 1. Peter Audi Oluoch: PhD Thesis Entitled: The Implementation of Adult Literacy Programme and its Impact on Enhancing Environmental Development And Management in Vihiga County, Kenya (Kisii University)
- Protus Wanjala (2017). Influence Of SMASSE Inset On Students' Achievement in Mathematics In Public Secondary Schools in Baringo North Sub-County, Baringo County
- MUKAGIHANA Josiane (2018). Effect of Resource-Based Instruction on Learning outcomes of Pre-Service Biology Teachers in Education-based Universities in Rwanda
- Josephat Paul Nkaizirwa (2018). Effect of Inquiry-Based Learning on Environmental Education Knowledge and Attitudes among Pre-Service Biology Teachers in Tanzania: RWANDA
- 5.

## WORK IN PROGRESS

7. Wati Henry (2017). Effects Of Computer Algebra Systems On Mathematics Achievement, Attitude And Motivation: A Case Of Tivet Public Institutions In Western Kenya Region

- Ochola, Alphayo (2017). Computer Practical Workbench Application in Teaching Form Three Physics and its Influence On Student Performance in Nairobi County-Kenya
- 9. Abisaki Oloo (2016). Phd Thesis Entitled: Towards Implementation of a Viable Non-Formal Curriculum in Secondary School Education in Kenya
- Khalayi Juliet Musungu (2016) MSC. Thesis Entitled: "Students' Misconceptions on Selected Kinematics Contexts In Physics Among Secondary School Students in Mumias Sub- County, Kenya"
- 11. Isabella Monchire (2015). Phd Thesis Entitled: 'Influence Of Students' Learning Styles, Achievement Motivation And Attitude On Performance On The Mole In Chemistry In Nakuru County Kenya'
- 12. Faith Mutange: Master's Proposal entitled: Assessment of Biology Teachers' Beliefs about Inquiry-Based Instruction.
- 13. Henry Olonje: Phd Proposal Entitled: Influence of Formative Assessment Practices on Student Academic Achievement in Public Secondary Schools in Siaya County, Kenya (Kisii University)
- 14. Rebecca Ayiti: Master's Proposal entitled: Practical Work and its Influence on Secondary School Students' Performance in Learning of Mole Concept in Chemistry

#### **b.** Thesis Examination

- 1. Anselme UWIMANA (2019). Assessment Of Artisanal Gold Mining Effect On Basic Education In Burera District
- 2. Bernadette NIKUZE (2019). The Role Of Environmental Education In Schools And Gold Miners' Awareness Of Environmental And Health Risks In Burera District
- Polycarp Muchesia Ishenyi (2019): PhD: Teachers' Technological, Pedagogical, Content Knowledge And Classroom Discourse: Effects on Achievement in Among Secondary School Students In Kakamega County
- 4. Lisamula Ackap (2017). Students' And Teachers' Perceptions Of Physics Practical Work In Secondary Schools In Kakamega East Sub-County, Kenya"
- Munyerere Florence (2017). Influence Of Smasse Inservice Training On Secondary School Biology Teachers' Instructional Preactices In Kakamega North Sub-County, Kenya
- Mbalilwa Michael (2016). Availability And Use If Instructional Resources And Its Influence On Performance In Mathematics In Secondary Schools Of Kakamega Central Sub-County, Kenya"
- Nabie Alice (2016) M.Sc. Thesis Entitled "Mind Mapping Technique and Its Effects on Achievement In Ecology Concepts Among Secondary School Students in Hamisi Sub-County, Kenya"
- Alphayo Abacha Ochola (2015)MSc.: Thesis Entitled "Physics Practical Work And Its Influence on Students' achievement, Attitude Change and Skills Acquisition in Form Two" MMUST
- 9. Monica Khasandi Mulongo (2015): MSc: Thesis Entitled "Integrating Micro Electricity Kits in Learning Secondary School Electricity" MMUST
- 10. Noah Wafula Wekesa (2015): MSc: Thesis Entitled "Project Based Learning On Students' Performance in the Concept of Classification of Organisms among Schools in Kenya"MMUST
- 11. John Ongwane Omaset (2015): Thesis Entitled "Teacher-Related Determinants For Effective Integration of Computer-Based Instruction in Biology in Teso South Sub-County, Kenya" MMUST
- 12. Antony Sifuna Bwasi (2015): MSc: Strengthening Mathematics And Science In Education Program And its Implementations In Teaching of Biology Among Secondary Schools in Kenya: MMUST
- 13. Fanuel M.M. Wesonga (2014): MSc: Thesis Entitled "Integrating Micro Science Kits in Secondary School Physics Experiments" MMUST
- 14. Bernard Justus Wekullo (2014). M.Sc. Thesis Entitled "Computer Programmed Instruction on Students' Mathematics Performance in Kenyan Public Secondary Schools": Internal Examiner; MMUST

- 15. Amos Jackson Kosasia (2014) M.Sc. Thesis Entitled "Determinants Of High School Students' Learning of Evolution in Kakamega Central District, Kenya": Internal Examiner; MMUST
- 16. Masinde Joseph Wangila M.Sc. (2014): Thesis Entitled "Programmed Instruction on Students' Performance in Structure of The Atom and the Periodic Table among Secondary Schools In Kenya": Internal Examiner, MMUST
- 17. Walter Gogo Odanya (2014). Ph.D. Thesis Entitled "Influence Of Cooperative Learning Instruction On Secondary School Students' Achievement and Self-Concept in Mathematics": Internal Examiner; MMUST
- 18. Ruth Nanjekho Wafubwa (2014), MSc. Thesis Entitled " The Implementation of Strengthening of mathematics and Science Education Project in the Teaching and Learning of Mathematics in Public Secondary Schools of Rangwe Division, HomaBay County- Kenya": External Examiner: Kisii University
- Electine Mbati (2013) M.Sc. Thesis Entitled "Factors Affecting Secondary School Students' Performance In Biology in Mumias District, Kenya": Internal Examiner; MMUST

## c. Conferences/Workshops/Seminars Organised

- 1. STEM EDUCATION INTERNATIONAL CONFERENCE (STEMEIC2020) Hosted virtually by MMUST: 25th-27th November, 2020
- 2. STEM EDUCATION INTERNATIONAL CONFERENCE (STEMEIC2021) Hosted virtually by MMUST: WORK IN PROGRESS17th-19th November, 2020

#### d. Promotions

- October, 2018: Promotion from Lecturer to Senior Lecturer
- September, 2013: Promotion from assistant Lecturer to Lecturer
- December, 2011: From Graduate Assistant to Assistant Lecturer

#### e. Responsibilities at MMUST

1<sup>st</sup> July 2015

17.

Area	Date	Responsibility		
1.	28th February, 2019	<ul> <li>Focal Point person, Inter-University Council of East Africa (IUCEA)</li> </ul>		
2.	19 <sup>th</sup> July, 2018	<ul> <li>Chairperson: Session WCTE</li> </ul>		
3.	24 <sup>th</sup> May, 2018	<ul> <li>Chairperson, Public Speakers and Event Movers Committee</li> </ul>		
4.	30 <sup>th</sup> March, 2018	<ul> <li>Deputy Chairperson: MMUST Webometrics Advisory Committee</li> </ul>		
5.	15th January, 2018	<ul> <li>Member of Scientific Committee: PAIRC</li> </ul>		
6.	15th January,2018	<ul> <li>Chairperson, Logistics Sub-committee: WCTE</li> </ul>		
7.	4th December, 2017	<ul> <li>Member, Solace Board</li> </ul>		
8.	13 <sup>th</sup> November, 2017	<ul> <li>Thesis Internal Examiner</li> </ul>		
9.	3 <sup>rd</sup> November, 2017	<ul> <li>Member of DIAL BOARD</li> </ul>		
10.	5 <sup>th</sup> October, 2017	<ul> <li>Chairperson, BodyFlex GYM Steering Committee</li> </ul>		
11.	3 <sup>rd</sup> October, 2017	<ul> <li>Reviewer of Congress Abstracts</li> </ul>		
12.	30th August,2017	<ul> <li>Member, Strategic and Institutional Planning Committee</li> </ul>		
13.	1 <sup>st</sup> August, 2017	<ul> <li>Member of Board of Postgraduate Studies</li> </ul>		
14.	9 <sup>th</sup> March, 2017	<ul> <li>Convenor, Committee of DIAL</li> </ul>		
15.	26 <sup>th</sup> May, 2016	<ul> <li>Member, FESS Student Handbook Committee</li> </ul>		
16.	January, 2016	<ul> <li>Member, TVET Board</li> </ul>		

• Chairperson, MMUST National Cohesion and Values

Mainstreaming Committee

18.	2014	•	Patron: International Students Organisation, MMUST
19.	2014	•	Member: Capacity Building on Grant Proposal Writing Committee
20.	2014	•	Member: Research, Extension, and Linkages (REL)

Committee

#### f. Responsibilities Outside MMUST

Area	Date	Responsibility
Diversity Education Institute, USA	July, 2020	Board of Directors Member
South-South Triangular Education Consortium (SSTEC)	May, 2020	Vice President
University of Rwanda, College of Education, School of Education: Centre for Postgraduate Studies	August, 2019	External Examiner, Masters Programmes
Centre for Mathematics, science and Technology Education in Africa (CEMESTEA)	June, 2019	Paper reviewer: Journal of Mathematics, Science and Technology Education (JOMSTE)
Inter-University Council of East Africa	February, 2019	IUCEA Focal Point Person
University of Rwanda, College of Education	October, 2018	External Programme Advisor: PhD in Mathematics and Science Education
University of Rwanda, College of Education	May, 2018	Staff Exchange: Post Graduate Mentoring
a) MOEST	Oct. 2015	Member, BOM, St. Luke's Shisango Girls Secondary School
b) MOEST	Dec. 2015	Member, BOM: Shikomere Girls' Secondary School
c) MOEST	Dec. 2015	Chairperson, BOM, Chebunaywa S.A. Secondary School
d) EUROPEAN Journal	March, 2014	Member, European Centre for Research Training and Development UK

#### g. Journal Article Reviews:

- 1. Manuscript Number: EJMSTE-00535-2016-01: The Development of Social Learning Model Based on Metacognitive Strategies to Foster Mathematics Self-Efficacy of Senior High School Students
- 2. Manuscript Number: IJAPR-13-101: An Analysis of the Household Solid Waste Generation Patterns and Prevailing Management Practices in Eldoret Town, Kenya. *International Journal of Agricultural Policy and Research*. 08-11-2013
- Manuscript Number:IJEPRR-13-007 "A Study Of Emotional Intelligence And Academic Achievement Of Secondary School Student In District Ganderbal- Kashmir." International Journal of Educational Policy Research and Review. <u>http://www.journalissues.org/journalshome.php?id=7</u>: 25-02-2014 I
- 4. Manuscript Number:IRJPEH-14-009. "Landfill site and its effects on the people of Gbalahi community in the Tamale Metropolis" International Research Journal of Public and Environmental Health. http://www.journalissues.org/journals-home.php?id=9:: 23-01-2014 Educational Policy Research and Review
- 5. Corporal Punishment as a Parental Practice and Anxiety in Middle Childhood Children Journal of Social Science Studies http://jsss.macrothink.org December, 2013

- 6. Preservice Teachers' Identity Discourse Involved in Their Science Learning Narratives and Science Teaching Philosophy Statements. *Journal of Social Science Studies* http://jsss.macrothink.org
- 7. Manuscript Number: ERJ-17-0011: "School management and sustainable quality of primary education in Ekiti State. *Educational Research Journal*. March, 2017

### h. Funds Attracted

September-October, 2020: PROenwek- DAAD: Euros 1819: Aurah, C.M. (CO-PI)

• Joseph Wangila Masinde (PI); **Aurah, C.M. (CO-PI)**: National Research Fund: Kshs: 640 Title of Proposal: "Software-Oriented Concept Mapping: A Metacognitive Strategy In Students' Learning of Electrochemistry Among Secondary Schools in Kakamega County, Kenya" Amount: Kshs. 639,00

• Susan Ouko (PI) ; Aurah, C.M. (CO-PI):NARCOSTI

Title of Proposal: Peer Instruction and Secondary School Students' Performance in Vectors Amount Awarded: Kshs. 600,000

• Fanuel Wesonga (PI); Aurah, C.M. (CO-PI) : (University Research Fund)

Title: Influence Of Teachers' Instructional Strategies And Students' Learning Styles On Performance Of Physics Practicals In Navakholo Sub-County, Kenya: Kshs. 200,00

• Wycliffe Mulavu (PI); Aurah, C.M. (CO-PI): University Research Fund

Title: Effects Of Multiple Instructional Approaches On Secondary School Students' Learning Outcomes In Chemistry In Vihiga County, Kenya: Kshs. 200,000

• Elizabeth Nanyama Mabele (PI); Aurah, C.M. (CO-PI): University Research Fund

Title: Effectiveness Of Implementing Inclusive Education Policy On Learners' Academic Performance In Public Primary Schools In Kakamega County, Kenya: Kshs. 200,000

## **Grants Applied for (Yet to be Funded):**

1. GENDER PARITY IN STEM: PEDAGOGICAL INTEGRATION OF TECHNOOGY IN STEM EDUCATION TO ENSURE RESILIENCE, QUALITY, EQUITY AND SUSTAINABILITY DURING AND POST COVID-19 (GEPSTEMIK)" PROJECT:

- Submitted to SPENCER FOUNDATION ON 4/2/2021

# PI: Dr. Aurah Catherine

CO-PIs: Dr. Orado Grace (CEMASTEA) & Dr. Robert Kati (Kibabii University) 2. GENDER ANALYSIS AND INCLUSION IN RESEARCH: A FOCUS ON INSTITUTIONAL TRANSFORMATIONS THAT STRENGTHEN WOMEN LEADERSHIP THROUGH STEA<sup>+</sup>M EDUCATION AND POLICY - Submitted to IDRC on 22/4/2021: NOT SUCCESSFUL

## **PI: Dr Aurah, Catherine**

CO-PIs: Dr. Edwige Kampire (University of Rwanda), Dr. Sell Kimosop (MMUST); Dr. Chikondi Shaba (Unversity of Malawi and Prof. Catherine Ndungo (Kenyatta University)

## i. Conferences/Symposia/Workshops/Webinars Attended:

- 1. November, 25th 27th, 2020: STEM EDUCATION INTERNATIONAL CONFERENCE (STEMEIC2020)
- 2. October, 29<sup>th</sup>-30<sup>th</sup>, 2020: 3RD FUTURE OF EDUCATION CONFERENCE: VIRTUAL: MALAYSIA
- 3. October-November, 2020: UR-CE; ACEITLMS SUPERVISORS' SERIES OF VIRTUAL WEBINARS
- 4. October-November: National Cohesion and Mainstreaming Webinars
- 5. September 4<sup>th</sup>, 2020: Education Virtual Conference(EVC2020): Sri Lanka
- 6. September/October, 2019: Brandenburg University of Applied Sciences, Germany: Practice-Oriented Education Exchange Programme
- 7. June, 2019: 2nd Future of Education International Conference, 2019: Bangkok, Thailand
- 8. November, 2018: 5th International STEM in Education Conference 2018, Brisbane, Australia
- 9. October, 2018: Risk Management Training at MCU MMUST

- 10. 5th-8th June, 2018: Building a Culture of Peace and Non-Violence Conference at Bishop Stam
- 11. 10<sup>th</sup>-24<sup>th</sup> May, 2018: Postgraduate Supervision and Staff Exchange: University of Rwanda
- **12.** April 26<sup>th</sup>- 2<sup>nd</sup>May, 2018: 5th International Conference On Education In Mathematics, Science And Technology (<u>ICEMST</u>), TURKEY;MARMARIS
- 13. 10th 15th April, 2018: FK Norway Partners' Training: Kampala, UGANDA
- 14. 21st 23rd December, 2017: NMT-DIES Deans Training at Karatina University
- 15. October, 2017: African Network Internationalisation of Education: Rwanda, Kigali
- 16. 26th-28th October, 2016: Harnessing Research, Innovation and Technology to Realise the Sustainable development Goals: CHUKA University
- 17. December, 2016: CEMESTEA: KCB Training Institute; Karen, Kenya
- 18. August, 2016: ISO at Bishop Stam
- 19. August, 2016: National Cohesion & National values for Focal Point Persons at Kisumu Hotel
- 20. May, 2016: National Cohesion and Values Sensitisation Workshop Kisumu Hotel
- 21. November, 2015: Performance Contracting at MMUST
- 22. November, 2015: Performance Contract Negotiation & vetting at MMUST
- 23. October, 2015: Grant Proposal Writing at Bishop Stam
- 24. June, 2015: Grant Writing & resource mobilization at Busia Agricultural center
- 25. May, 2015: Deans; Directors; Coordinators; and COD Induction Workshop at Bishop Stam
- 26. March, 2014: FESS Stakeholder Workshop on Curriculum Review, Development and Implementation at MMUST
- 27. January, 2014: University Multiplication Training Workshop on Curriculum Development and Review for Public Universities in Kenya: Implementation and Accreditation at MMUST
- 28. April, 2008: Gender Sensitisation Workshop at Savona Isle Resort
- 29. 2013: HASTI Conference: Indianapolis, Indiana, USA
- 30. 2012: Annual Sigma XI Conference: Ball State Chapter
- 31. 2012: NARST Conference
- 32. 2011 Annual Mid-Western Psychological Association (MPA) Conference in Chicago: Promoting Children's Environmental Attitudes, behaviors, and Efficacy
- 33. 2011 BSU Annual Student Symposium Promoting Children's Environmental Attitudes, behaviors, and Efficacy
- 34. Conference 2010 (SIRAS in Kentucky) Paper Presentation
- 35. BSU 2010 Student Symposium: Sustainability of Plastic Bag Waste Management Methods in Kenya

### k. Membership to Professional Bodies

Member: The African Network for Internationalization of Education (*ANIE*) Member: AWSE: African Women in Science Education Member: HASTI: Hossier Association of Science Teachers, Indiana, USA

#### I. Membership to Organizations/Associations/Societies

- Kakamega Sports Club
- Kakamega Rotary Club
- Soroptimist International: Vihiga Club
- Sigma XI: Ball State University Chapter
- SIERRA Club: USA

#### SKILLS AND ABILITIES

Computer: Microsoft Office Word; Microsoft Office Powerpoint; Microsoft Office Excel; Microsoft Office Publishers

SPSS: Data Analysis: Descriptives; Correlations, t-tests; ANOVA Family; ANCOVA; MANOVA, MANCOVA; REGRESSIONS: Simple Linear Regression; Multiple Linear Regression (Simultaneous and Hierarchical), Factor Analysis; and Discriminant Data Analysis

#### Referees

- 1. Prof. William W. Toili
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# 2. Prof. Maurice M. Amadalo

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### **3. Prof. Tom J. McConnell** Associate Professor: Ball State University

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Signed:

Alles F

Dr. Aurah, Catherine M. 13<sup>th</sup> January, 2021