



CURRICULUM VITAE OF WILLIAM WANJALA TOILI

PERSONAL DETAILS

FULL NAME : PROF. WILLIAM WANJALA TOILI

DATE OF BIRTH : 18TH APRIL 1953

NATIONALITY : Kenyan

MARITAL STATUS : Married

PLACE OF WORK: Masinde Muliro University of Science and Technology (MMUST)
Department of Science and Mathematics Education
P.O. Box 190 -50100
KAKAMEGA, KENYA

CURRENT APPOINTMENT: E-mail: wtoili@yahoo.com or twanjala@mmust.ac.ke
Professor of Science and Environmental Education

OBJECTIVE

To effectively conduct research and disseminate knowledge and skills through teaching, publication, training and outreach in order to empower humanity to realize their potential and control their destiny.

WORKING EXPERIENCE

Full-time Teaching at University Level

1.September, 2015 to August, 2016: Visiting Professor on sabbatical leave at the University of Eldoret, Centre for Teacher Education, School of Education.

Responsibilities:

Developing research proposals for funding at the Centre for Teacher Education, teaching and examining in biology education at undergraduate level and supervising students at postgraduate level, and identifying conference themes to be undertaken by faculty.

2. August 2003 to date: Masinde Muliro University of Science & (MMUST).

MMUST is a public university located in Kakamega Municipality, Kakamega County, Kenya.

Rank: Professor in the Department of science and Mathematics Education

Responsibilities:

- Chairman, Department of Science and Mathematics Education (2003-2009).
- Teaching and examining students in the courses taught.
- Member of various School of Education and Senate committees.
- Chairman, Curriculum Review Committee of Senate (March,2014-2020): overseeing curriculum development and review with a view to aligning programmes to Commission for University Education curriculum standards and guidelines.
- University Representative to the Credit Accumulation and Transfer Systems (CATS) Project in the Education Fields, at Commission for University Education (Since 2011 to date).
- Ag. Director, Research in Division of Planning, Research and Extension (May- July, 2010).
- Ag. Dean, Faculty of Education and Social Sciences (Jan. –April, 2005).

Achievements:

- Successfully taught and examined the following courses at certificate, diploma, Undergraduate and graduate levels in the School of Education:

Certificate courses

- Action research for Global Education Linkages

Diploma Courses (In-service programme for teachers at Kakuma, Djibouti and Dadaab refugee camps)

- Introduction to Pedagogy
- Environment Education in Primary Schools

Under graduate courses (B.Ed in Arts/ Science; B.Sc in primary Education)

- Biology Education
- Environmental Education
- Instructional Media and Technology
- Primary science and mathematics curricula
- Teaching primary science
- Research Methods in primary science

Postgraduate Courses (M.Sc in Education; M.Sc in Environmental Education)

- Methods and practices of Teaching Biology
- Nature and philosophy of science and science education

- History and Philosophy of Environmental Education
- Climate Change and Africa
- Advances in Environmental Risk Management
- Quality Assurance in Science Education
- Curriculum Development in science Education
- Learning in science
- Assessment in science learning
- Environmental Issues in Project Planning and Management
- Education, Training and Public awareness for Disaster Management
- Environmental Policy and Education
- Research Methods II (Writing research proposals and reports)
- Advanced Research Methods
- Curriculum Development
- Management of Learning in Institutions
- Successfully supervised Master's and Doctorate students in the School of Education
- Spearheaded revision of MMUST strategic plan through the funds and training provided by the Association of African Universities and the Association of Universities and Colleges of Canada and in partnership with University of the Fraser Valley, Canada (2010-2013)
- Spearheaded the coordination of the revision and development of MMUST academic programmes in readiness for accreditation by Commission for University Education (CUE). As at 2020, 211 academic programmes had been refined in readiness for accreditation.
- Development of University Research Policy in 2010 which is now in operation
- Spearheaded the production of Department of Science and Mathematics Education (MMUST) academic Strategic Plan at the workshop held at Blue York Hotel, Busia in **September, 2008**
- Member of Institutional Development Committee charged with the responsibility of developing MMUST Strategic Plan that is currently in operation and its review. The committee was also responsible for conducting onsite evaluation of facilities for establishment of new study centres and campuses and the production of the Strategic plan (2005-2018)
- Development of B.Sc (Primary Education) and M. Sc (Education) degree Programs currently in use in the Department of Science and Mathematics Education. (2004-2006)

3.December, 1990 - July, 2003: Maseno University, Department of Educational Management

Rank: Senior Lecturer (1998-2003); Lecturer (1993-1998); Assistant Lecturer (1990-1992).

Responsibilities:

Teaching and examining Environmental Education, Curriculum Development and Research Methods.

Part-time Teaching at University Level:

1.2017-2019: Tom Mboya University College

Teaching and examining undergraduate students in Environmental Education.

2.May, 2015-to date: Jomo Kenyatta University of Agriculture and Technology, Kitale Campus

Responsibilities

Teaching, examining and supervising postgraduate/undergraduate students in the following courses:

- Population, Demography and Development (M.A in Development Studies)
- Education and Development (M.A in Development Studies)
- Education and Development (B.A in Development Studies)
- Environment and Development (B.A in Development Studies)
- Technology and Innovation (B.COM)

3.May, 2014 to Date: Mount Kenya University, School of Education, Kakamega and Kitale Campuses

Responsibilities

Teaching, examining and supervising postgraduate students in the following course:

- Management of Learning in Institutions
- Challenges of educational planning in third world countries
- Legal issues in Education
- Legal Foundations in Educational Planning
- Scholarly writing and publication skills
- Research methods
- Total Quality Management
- General Management
- Creativity, innovation and change

4. 2008-2020: University of Nairobi, College of Education and External Studies, School of Continuing and Distance Education, Department of Extra-Mural Studies, Kakamega Campus and Bungoma Centre.

Responsibilities

Teaching, examining and supervising postgraduate students in the following course:

- Environmental Issues in Project Planning and Management

5.January, 2009-March, 2011: Maseno University, Department of Educational Management and Foundations.

Responsibilities

Teaching, examining and supervising postgraduate students in Environmental Education

6. January, 2010- March, 2011: Bondo University College (now Jaramogi Oginga Odinga University of Science and Technology), Department of Educational Management.

Responsibilities

Teaching, examining and supervising postgraduate students in Environmental Education

Quality Assurance at Ministry of Education

August 1990- November, 1990: Ministry of Education Headquarters, Inspectorate Section.

Rank: Senior Inspector of Schools in charge of Primary Science

Teaching in Middle Level Colleges

June, 1985-November, 1985: Kaimosi Teacher Training College

Rank: Tutor in Science Education and Professional Studies.

Curriculum Development Engagement

December, 1985 - November, 1990: Kenya Institute of Education

Rank: Curriculum Specialist in Primary School Science, Primary Teacher Education and Secondary School Biology

Responsibilities

- In servicing science tutors in teacher training colleges in order to improve their skills in science teaching.
- Serving on the National Panel for Setting and moderating external examinations (both the Kenya Certificate of Primary Education and the Kenya Certificate of Secondary Education) at the Kenya National Examination Council.
- Designing, Piloting and Evaluating primary and secondary school Science Curriculum and curriculum materials in Kenya.

Teaching at High School Level

January, 1982-August, 1983: St. Joseph's Chepterit Girls High School, P.O. Box 51, Kapsabet

Rank: Teacher of Biology and Dean of Curriculum

January, 1980-December, 1981: Ribe High School, P.O. Box 90122, Mombasa.

Rank: Teacher of Biology and Head of Biology Department

September, 1978-December, 1980: Allidina Visram High School, P.O. Box 90251, Mombasa.

Rank: Teacher of Biology, Geography and General Paper (A level)

EDUCATION AND ACADEMIC QUALIFICATION

January, 1997 – September, 2001: Maseno University, Kenya

Awarded Doctor of Philosophy in Education (November, 2001).

Thesis Title: *Impact of Environmental Education on Secondary School Students' Perspectives of Environmental Quality in Bungoma District, Kenya*, Maseno University, Kenya, 2001.

Supervisors: Prof. Walgio O. Orwa
Prof. Richard T. Ogonda.

October, 1988 – May, 1989 : University of Leeds, England, U.K

Awarded Master of Science in Science and Environmental Education (May, 1990).

Title of Dissertation: *Environmental Education: Towards a Curriculum and Instructional Policy in Primary Schools in Kenya*. School of Education, University of Leeds, England (U.K); August 1989.

Supervisor: Dr. G. Knamiller

April, 1987-May, 1987: Moi University, Kenya

Awarded Postgraduate Certificate in Environmental Education (1993)

September, 1983 – October, 1985 : University of Nairobi, Kenya

Awarded Master of Education in Teacher Education (Science Education and Curriculum Development) (November, 1985).

Title of Project: *A Study of Science Process Skills Acquired Through Primary Science Curriculum: A Case Study of Standard Seven Pupils in Bungoma District, Kenya*. University of Nairobi, 1985.

Supervisor: Dr. C. Namuddu.

October, 1975 – November, 1978 : University of Nairobi, Kenya

Awarded Bachelor of Education in Science (Upper Second-Class Honours) in Botany and Zoology (November, 1978).

May, 1973 – November, 1974: Kapsabet High School, Nandi District, Kenya

Awarded East African Advanced Certificate of Education and obtained two Principles and

One Subsidiary in Biology, Geography, and Mathematics respectively

January, 1969 – November, 1972: Kolanya High School, Busia District, Kenya.

Awarded East African Certificate of Education/Cambridge School Certificate and obtained Division One (1) (16 points grade aggregate). This was the best performance in the history of the school.

January, 1961 – November, 1968: Mahanga Primary School, Bungoma District, Kenya

Awarded Primary Certificate of Education and obtained 25 points.

ACADEMIC AWARDS

March, 2013: Israel Agency for International Development Cooperation, Ministry of Foreign Affairs

Funds provided enabled me to attend one-month long seminar on “Education towards Sustainable Development: Training for Educational Personnel-Kenya”, held at the Aaron Ofri International Training Centre Jerusalem, April 8-May 2, 2013.

October, 2010-April, 2013: Association of African Universities in collaboration with Association of Universities and colleges of Canada through Canadian International Development Agency

Funds provided enabled me and Prof. J.O Shiundu to travel to our collaborating institution- University of the Fraser Valley, Canada- to gain skills in developing university strategic plan and help improve the strategic plan and planning process for Masinde Muliro University of Science and Technology.

2008-2010: Research grant of MMUST by office of the Deputy Vice- Chancellor (Planning, Research and Extension)

Grant used to conduct Research on the topic: “Investigating Metacognitive Abilities among High School students in science.”

2005-2012: Inter-University Council for East Africa under the auspices of Lake Victoria Basin Research Initiative (VicRes)

Funds enabled me to conduct research in Jinja District of Uganda geared towards alleviation of poverty within the Lake Victoria Basin of East Africa. The title of the study was: “*An Evaluation of the production and utilization of Pumpkins (Curcubita pepo) for poverty reduction among smallholder farmers in Lake Victoria Basin*”. Several papers have been published from the results and elaborate dissemination of the results was done at the research sites in Busia, Kakamega and Kisii counties of Kenya.

1994-1997 : The Kenya, Uganda, Tanzania Educational Research Award (KUTERA) in collaboration with the International Development Research Centre (IDRC)

Funds helped me to be trained in developing research proposals and conducting qualitative research projects. The results were in part used to develop my ph D research proposal and to conduct the ensuing research.

1994-1995: Institute of Research and Postgraduate Studies, Maseno University

The grant was used to help me develop my Ph D degree research proposal and to conduct literature review for the same.

October, 1988-June, 1989: The British Council Technical Co-operation and Training Award

The fund enabled me to study Science Education at the University of Leeds, England for the 1988/89 Academic year.

September, 1983-November, 1985: The Ministry of Education Award to study at Kenyatta University College

The award enabled me to study for the Masters Degree course in Teacher Education at Kenyatta University College, then a constituent college of University of Nairobi.

September, 1975-November, 1978 : Ministry of Education, Government of Kenya

Grant enabled me to study for B Ed. (Science) degree at University of Nairobi.

ACADEMIC CONSULTANCY

May, 2022: External examiner in the department of Curriculum and Instruction, **Garissa University**

June, 2013- Dec.2017: External examiner in the department of educational communications and Technology, **Kenyatta University**

-Examined and Moderated examination results in the areas of Teaching methods in Mathematics, biology, physics and chemistry.

June, 2015 to date: Resource person, **Inter-University Council for East Africa, Kampala, Uganda**

-Establishment of standards and guidelines and development of benchmarks and prototype curriculum for professional degrees in Education (Bachelor of Education in Arts and science and primary education option) in East Africa, under the Credit Accumulation and Transfer System for Eastern Africa programme.

March, 2008 to date: Resource person and Peer reviewer **Commission for University Education, Nairobi, Kenya**

- Review of new and revised university programmes in Kenya for accreditation by Commission for University Education;
- Establishment of Credit Accumulation and Transfer System for Eastern Africa Region in collaboration with the Inter-University Council for East Africa;

January, 2005 to date: Peer reviewer of articles in various journals:

- Maseno Journal of Education, Arts and Science

- International Journal of Environmental and Science Education (Turkey)
- Eurasia Journal of Science and Mathematics Education (Turkey)
- Journal of Science, Technology, Education & Management (MMUST)

January 2004-2019: Development of institutional programmes and strategic plans for Masinde Muliro University of Science and Technology and other tertiary institutions

January 2002-2019: Editorial board member of various journals:

- Pied Crow Environmental Magazine sponsored by CARE International in Kenya.
- Journal of Science, Technology, Education & Management (MMUST)

Achievements

- Re-evaluation of proposed B.Ed (Primary) degree curriculum for Sacred Heart University College-Nyeri (for accreditation under auspices of Commission for University Education) (**December, 2015**)
- Onsite Assessment of Facilities and Personnel for Implementation of B.Ed in Primary Education degree programme of Mt. Kenya University, Thika (**November, 2015**)
- Evaluation of proposed B.Ed (Primary Education) degree curriculum for Sacred Heart University College-Nyeri (for accreditation under auspices of Commission for University Education) (**May, 2015**)
- Re-evaluation of proposed B.Ed (Primary) degree curriculum for Riara University (for accreditation under auspices of Commission for University Education) (**May, 2015**)
- Bench marking for establishment of standards and guidelines for professional degree programmes in education in Eastern Africa Region at the workshop held at Zanzibar Ocean View Hotel, Zanzibar on **June 9-12, 2015**; under the auspices of Inter-University Council for East Africa
- Evaluation of proposed B.Ed (Arts) degree curriculum for Umma University (for accreditation under auspices of Commission for University Education) (**July, 2015**)
- Evaluation of proposed B.Ed (Primary) degree curriculum for Mount Kenya University (for accreditation under auspices of Commission for University Education) (**February, 2014**)
- Evaluation of proposed B.Ed (Primary) degree curriculum for Riara University (for accreditation under auspices of Commission for Higher Education).(**December,2012**)
- Evaluation of proposed B.Ed in Science degree curriculum for Marist International University College (for accreditation under auspices of Commission for Higher Education) (**July, 2012**)
- Evaluation of proposed Curriculum for B.Ed in Science for Nakuru University (for accreditation under auspices of Commission for Higher Education) (**April, 2012**)
- Revision of MMUST strategic plan under the auspices of AAU and AUCC through partnership with MMUST and University of the Fraser Valley,Canada
- Evaluation of proposed curriculum for B.Ed in Primary Education for Africa Interstates University, Eldoret (For accreditation under auspices of Commission for Higher Education) (**November, 2011**)

- Evaluation of proposed Curriculum for B.Ed in Science for University of East Africa (for accreditation under auspices of Commission for Higher Education) (**January, 2010**)
- Evaluation of proposed Curriculum for B.Ed in Science for Presbyterian University of East Africa (for accreditation under auspices of Commission for Higher Education) (**September, 2009**)
- Onsite Assessment of Facilities and Personnel for Implementation of B.Ed in Science degree programme of Mt. Kenya University, Thika (**August, 2009**)
- Evaluation of proposed Curriculum for B.Ed in Science and Counseling for Kenya Methodist University (for accreditation under the auspices of Commission for Higher Education) (**March, 2009**)
- Review of Evaluation Report of the proposed B.Ed (Science) degree curriculum for Mt. Kenya University (For accreditation under auspices of Commission for Higher Education) (**May, 2000**)
- Member of Senate evaluation committee for evaluation of B.Ed Science Program, Maseno University (**January-April, 2000**)
- Regularly Reviews articles in the following referred journals:
 - Maseno Journal of Education, Arts and Science – 4 articles
 - International Journal of Environmental and Science Education (Turkey) – 8 articles.
 - Eurasia Journal of Science and Mathematics Education (Turkey)– 4 articles
 - Journal of Science, Technology, Education & Management – 4 articles
- Development of Environmental Education Program, Great Lakes University of Kisumu (**January, 2008**)
- Production of Strategic plan 2007 – 2012: Sigalagala Technical Training Institute, held at Mabanga Farmers Training College, Bungoma (**May, 2007**)
- Production of Department of Science and Mathematics Education Academic / Strategic Plan (**September, 2008**)
- Development of Strategic Plan for Department of Science and Mathematics Education, MMUST (**September, 2008**)
- Production of Strategic plan, Masinde Muliro University of Science and Technology.; A collaborative endeavor by Institutional Development Committee of which I am a member (**2006-2011**)
- Development of B.Sc (Primary Education) degree Program, Masinde Muliro University of Science Technology (**2004**)

SKILLS IMPROVEMENT TRAINING

November 17th-18th, 2016: Astoria Hotel, Naivasha

Gained skills in mechanisms of coordinating curriculum development and review of universities' curricula with specific reference to Standards and guidelines for accreditation of universities in Kenya at the "**University Curriculum coordinators Induction Workshop**". The workshop was co-sponsored by the Commission for University Education and the participating universities.

November 17th-18th, 2015: Lake Nakuru Flamingo Lodge, Nakuru

Gained skills in mechanisms of external peer review of universities with specific reference to Standards and guidelines for accreditation of universities in Kenya at the "**External Peer Reviewers Induction Workshop**". The workshop was sponsored by the Commission for University Education.

April 8th, 2013-May 2nd 2013: Aaron Ofri International Training Centre, Jerusalem

Gained skills in mainstreaming "Education for Sustainable Development" in educational programmes through the one-month Seminar on "Education towards Sustainable Development: Training for Educational Personnel-Kenya". The Training was funded by the Israel Government through the Israel Agency for International Development Cooperation, Ministry of Foreign Affairs.

March 24th-March 25th, 2011: Kenya School of Monetary Studies, Nairobi

Gained skills in mechanisms of external peer review of universities with specific reference to Standards and guidelines for accreditation of universities in Kenya at the "Stakeholders' workshop on External Peer Review of Universities". The workshop was sponsored by the Commission for Higher Education.

October 29th –October 30th, 2011 : Kenya School of Monetary Studies, Nairobi

Gained skills in university strategic planning with a view to incorporating Stakeholders such as industries and the community at "Stakeholder Relations in Higher Education for Africa" workshop. The Workshop was sponsored by the Association of African Universities and an Association of Universities and Colleges of Canada.

2007-2012: Masinde Muliro University of Science and Technology

ISO 9000 Awareness and Operationalization seminars on Quality Management Systems held in MMUST

October, 2007: Gurdoto Hotel, Arusha, Tanzania.

Gained skills in evaluating research outputs at a workshop organized by Lake Victoria Basin Research Initiative (Vicres), sponsored by Interuniversity Council for East Africa in collaboration with SIDA.

SPECIAL SKILLS

- Developing University programmes within CUE standards and guidelines
- Setting personal and organizational goals and effectively implementing them.
- Conducting informed guidance and counseling of both youths and adults.
- Preparing effective academic and small-scale research proposals and writing comprehensive reports
- Developing and evaluating academic programs at all levels and sectors of education.
- Citizenship action skills such as mobilizing people to conduct informed environmental conservation.
- Organizing successful seminars/workshops.
- Preparing effective institutional strategic plans.

THESES EXAMINATION

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1. Barde, Mohamed “Tearchers’ Readiness for Integration of Information Communication and Technology in The Teaching of Biology in Secondary Schools of Bauchi State, Nigeria”,2017(Kenyatta University)
 2. External Examination Report of Mwalya Samuel Kyavoa’s Master of Education Thesis Titled: “Gender Ditterences in Mathematics Performance at Secondary School Level in Kandara Sub-County, Murang’a County, Kenya”,2017(Kenyatta University)
 3. External Examination Report of Muiruri Hiram’s Master of Education Thesis Titled: “Comparison of Integrated Computer Assisted Instructions and Conventional Instructional Techniques in Chemistry in Secondary Schools in Kiambu County, Kenya”,2017(Kenyatta University)
 4. External Examination Report of Mogeni Jackson Mobisa’s Doctor of Philosophy Thesis Titled: “Integration of Information and Communication Technologies into Instruction in Selected Nepad E-Schools, Kenya”,2017(Kenyatta University)
 5. External Examination Report of Abwao Linet Kuya’s Master of Education Thesis Titled: “Methods of Teaching Home Science and their Effects on Youth Unemployment Crisis in Kakamega County, Kenya”,2017(Kenyatta University)
 6. External Examination Report of Mukiri Irene Mwangirwa’s Doctor of Philosophy Thesis Titled: “Use of Geogebra in the Teaching and Learning of Geometry Concepts in Secondary School in Kajiado County, Kenya”,2017(Kenyatta University)
 7. External Examination Report of Mogeni Jackson Mobisa’s Doctor of Philosophy Thesis Titled: “Integration of Information and Communication Technologies into Instruction in Selected Nepad E-Schools, Kenya”,2017(Kenyatta University)
 8. External Examination Report of Kamau Mary Wambui’s Master of Education Thesis Titled: “Mathematics Performance: Potency of Affective Disposition Among Girls in Secondary Schools of Westlands District, Nairobi County, Kenya”,2017(Kenyatta University)

9. External Examination Report of Jesse Samuel Nyaga's Doctor of Philosophy Thesis Titled: "Impact of Curriculum Digital Content on Biology Instructional Process among Secondary Schools in Nairobi County, Kenya", 2016 (Kenyatta University)
10. Internal Examination Report of Samikwo C. Dinah's Doctor of Philosophy in Science Education Thesis Titled: "Effect of Computer-Assisted Learning on Secondary School Students' Achievement in Biology in Kenya: The Case of Selected Schools in Mt.Elgon Sub-County, Bungoma County", University of Eldoret, 2016
11. Eduafo, Arthur Benjamin, "Effects of a Problem-solving Approach on Distance Learners' Achievement in Mathematics: A case study of University of Cape Coast, Ghana, Ph.D Thesis, Kenyatta University, 2014. (*External examiner*).
12. Twum, Rosemary, "Influence of mobile phone technologies on science students' academic performance in selected Ghanaian public universities," Ph.D Thesis, Kenyatta University, 2014. (*External examiner*).
13. Wanjiru, Benson Njoroge, "Effects of mathematical vocabulary instruction on students' achievement in mathematics in secondary schools of Murang'a County, Kenya", Ph.D Thesis, Kenyatta University, 2014. (*External examiner*).
14. Nduati, Sammy Chiragu, "The Comparison of computer assisted learning to traditional methods in teaching chemistry in secondary schools in Murang'a County, Kenya", M.Ed Thesis, Kenyatta University, 2014. (*External examination*).
15. Makanda, John Livingstone, "Use of ICT in teaching physics: A case of secondary schools in Kimilili District, Bungoma County, Kenya", M.Ed Thesis, Kenyatta University, 2014. (*External examination*).
16. Gideon M. Mwanda, "Integration of computer technology into teaching of biology in secondary schools of Rachuonyo South District, Homa Bay County, Kenya". M.Ed Thesis, Kenyatta University, 2014. (*External examination*).
17. Maina A. Wanjiru, "Competence in practical biological skills: A study of Form three students in Thika West Sub-county, Kiambu County". M.Ed Thesis, Kenyatta University, 2014. (*External examination*).
18. Njoka E. Mukami, "Utilization of chemistry laboratories in teaching chemistry in public secondary schools in Meru South District, Kenya." M.Ed Thesis, Kenyatta University, 2014. (*External examination*).
19. Daniel K. Cheruiyot, "Classroom verbal interaction patterns in relation to student performance in physics in Baringo Central Sub-county, Kenya." M.Ed Thesis, Kenyatta University, 2014. (*External examination*).
20. Kanyoro, Alice Wanjiru, "Effects of socio-economic factors on students' performance in science subjects in Kirinyaga Central District, Kenya" M.Ed Thesis, Kenyatta University, 2014. (*External examination*).
21. Wasonga, Vincent Otieno, "Effects of concept mapping instruction on students' achievement in physics in public ICT secondary schools, Nairobi County, Kenya", M.Ed Thesis, Kenyatta University, 2014. (*External examination*).
22. Ngigi, Stephen Chege, "Remediating errors made by secondary school students in solving mathematics word problems in Gatanga sub-county, Murang'a County, Kenya", M.Ed Thesis, Kenyatta University, 2014. (*External examination*).

23. Kikechi, Ronald Werunga.” Influence of Technical Subjects on Acquisition of Entrepreneurial Skills for Self-employment among Secondary School Graduates in Kenya. Ph.D Thesis, Masinde Muliro University of Science and Technology, 2014. (Internal Examination)
24. Silas M. Chepkwony,” Secondary education constituency bursary fund and retention of students from vulnerable background in Kenya.” Ph.D Thesis, Masinde Muliro University of Science and Technology, 2014. (Internal Examination)
25. Barasa O. Ibrahim,”Secondary school students’ perception of the role of alternative sources of energy in sustainable development.” M.Sc Education Thesis, Masinde Muliro University of Science and Technology, 2010. (Internal Examination)
26. Willyter C. Mibei,” Integrating computer technology in learning cell biology in secondary schools in Kenya.” M.Sc Education Thesis, Masinde Muliro University of Science and Technology, 2014. (Internal Examination)
27. Chesang Chepyegon,” Use of scientific language in instruction and performance in chemistry: A case of selected schools in Kabarnet Division Baring District.” M.Ed Thesis, Kenyatta University, 2010. (*External examination*).
28. Samuel J. Nyaga,” Comparison of computer assisted instruction and conventional instructional methods in secondary schools in Embu District, Kenya.” M.Ed Thesis, Kenyatta University, 2010. (*External examination*).
29. Polycarp M. Isenyi,” Perception of preservice teachers towards the use of computers in instruction in mathematics in secondary schools in Kenya.” M.Sc Education Thesis, Masinde Muliro University of Science and Technology, 2012. (Internal Examination)
30. Redempta A.J Munyendo,” The effects of HIV and AIDS on orphan boys education in public primary schools in Nairobi East, Kenya. M. Ed Thesis, Masinde Muliro University of Science and Technology, 2012. (Internal Examination)
31. Edward W. Nyongesa,” The head teacher appointment policy in Kenya: Implications for the management of secondary schools in Bungoma East District. M. Ed Thesis, Masinde Muliro University of Science and Technology, 2010. (Internal Examination)
32. Evans L Chimoita,” Secondary school students’ understanding of energy flows in ecosystems: A case of Lugari District, Kenya. M.Sc Education Thesis, Masinde Muliro University of Science and Technology, 2010. (Internal Examination)
33. Henry Wati,” Effects of computer-based instruction on mathematics achievement: A case of secondary school students of Kakamega South District.” M.Sc Education Thesis, Masinde Muliro University of Science and Technology, 2011. (Internal Examination)
34. Phelistas Watitwa,” An investigation of student related factors that affect in biology practicals in Teso District, Kenya.” M.Sc Education Thesis, Masinde Muliro University of Science and Technology, 2010. (Internal Examination)

35. Robert O. Kati," Reelationship between teacher factors and primary school mathematics achievement."M.Sc Education Thesis, Masinde Muliro University of Science and Technology, 2010. . (Internal Examination)
36. Jane Kwambita Amunga," The effects of ranking secondary schools and students' in national examinations in Kenya:Acase of Kakamega South District." M.Ed Thesis, Masinde Muliro University of Science and Technology, 2010. (Internal Examination)
37. Muga, L.A. "Factors Affecting Enrolment of Women in Science and Technology Courses in Polytechnics of Kenya. The Case Study of Mombasa Polytechnic." M.Ed Thesis, Maseno University, 2003. (Internal Examination)
38. Jane Barasa," Effects of conversion of co-educational schools on schools to single sex schools on students' discipline and academic performance." M.Ed Thesis, Masinde Muliro University of Science and Technology, 2010. (Internal Examination)
39. Odebero, S.O. "Bursary as a Method of Financing Secondary School Education in Busia, District, Kenya." M.Ed Thesis, Maseno University, 2002. (Internal Examination)
40. Gogo, J.O. "The Impact of Cost Sharing on Access, Equity and Quality of Secondary Education in Rachuonyo District, Kenya." M.Ed Thesis, Maseno University, 2002. (Internal Examination)

THESES SUPERVISION

1. N. Kevogo, 'Impact of computer application on the learning, perception of learning, and achievement in biology by secondary school students in Kenya'. P.hD (Curriculum and Instruction) Thesis, Masinde Muliro University of Science and Technology, 2014.
2. B.N Shikuku,'Problem based learning technique and its effect on secondary school students' performance in basics of linear programming in Kenya.' P.hD (Mathematics education) Thesis, Masinde Muliro University of Science and Technology, 2014.
3. Amos Kosasia,'Secondary school students' perception of Evolution in Kenya.' M.Sc (Education) Thesis, Masinde Muliro University of Science and Technology, 2014.
4. W.G.Odanya, Influence of cooperative learning instruction on secondary school students' self-concept development and achievement in mathematics'. P.hD (Mathematics Education) Thesis, Masinde Muliro University of Science and Technology, 2014.
5. M.O Atia,'Job satisfaction and career commitment among public primary school teachers in Kisumu Municipality' M.Ed (Guidance and Counseling) Thesis, Masinde Muliro University of Science and Technology, 2014
6. D.W. Wasike, 'Effect of computer-based instruction on secondary school students' understanding of mathematical probability concepts.' P.hD (Mathematics Education) Thesis, Masinde Muliro University of Science and Technology, 2013.

7. P. Nyongesa, 'Impact of teachers' service commission's usage of management by objectives on teachers' performance in Bungoma County'. M.Sc (Education) Thesis, Masinde Muliro University of Science and Technology, 2013.
8. J. Khasandi, 'Impact of sex education on performance of girls in secondary school education', M.Ed Thesis, Masinde Muliro University of Science and Technology, 2013.
9. C. Bulinda, 'Influence of business process reengineering on performance of communication corporations in Kenya'. M.Sc Thesis, Masinde Muliro University of Science and Technology, 2013.
10. R.J.Songok, 'Teachers' perception of philosophical foundations of environmental education for sustainability in secondary schools of Kenya.' M.Sc(Education)Thesis, Masinde Muliro University of Science and Technology, 2013.
11. J.N.Lyanda, 'Influence of a teacher's gender on student performance in biology in secondary schools in Kenya.' M.Ed Thesis, Masinde Muliro University of Science and Technology, 2013.
12. E.Atieno Mbatia, 'Factors affecting secondary school performance in biology in Mumias District, Kenya'. M.Sc (Education) Thesis, Masinde Muliro University of Science and Technology, 2013.
13. Emily Mukabana, 'The rise of women participation in provincial administration leadership in Kenya.M.A(History)Thesis, Mount Kenya University,2013.
14. G.N. Barasa, 'A historical analysis of the influence of economic and socio-cultural factors on women's participation in politics in Kakamega Central,Kenya(1963-2013). M.A (History) Thesis, Mount Kenya University, 2013.
15. C. M. Aurah, 'Assessment of Extent to Which Plastic Bag Waste Management Methods used in Nairobi City to Promote Sustainability. M.Sc Education Thesis,Masinde Muliro University of Science and Technology, 2012.
16. J. N. Nakhungu, 'Effect of Selected Educational Inputs on Students' Performance in Secondary Schools of Mumias District,Kenya. M.Ed Thesis,Masinde Muliro University of Science and Technology, 2012.
17. Beatrice M. O Barasa, 'University Students' Perception of Environmental Health Risks: A case of Masinde Muliro University of Science and Technology, M.Sc(Education) Thesis, Masinde Muliro University of Science and Technology, 2010.
18. Marble N.Odhiambo, 'Implications of the use of Scientific Calculators on secondary school students' achievement in mathematics. M.Sc Education Thesis,Masinde Muliro University of Science and Technology, 2010.
19. B. Anangwe, 'Trend and nature of flow rates of masters of education students in Moi and Maseno universities in Kenya. M.Ed Thesis,Masinde Muliro University of Science and Technology, 2010.

20. Metrine W. Sulungai,” Teacher related factors influencing integration of computers in mathematics instruction in Kakamega South District secondary schools.
M.Sc Education Thesis, Masinde Muliro University of Science and Technology, 2010.
21. Akwee Peter Edome,” Integration of computer-based technology in teaching and learning of gene concept in secondary schools of Kakamega Central District, Kenya.
M.Sc Education Thesis, Masinde Muliro University of Science and Technology, 2010.
22. J.R. Onyango,”Factors influencing cost of primary education in public primary schools in Busia District,Kenya”.M.Ed Thesis,Masinde Muliro University of Science and Technology, 2011
23. Jason A. Omufwoko,” Secondary school students’ understanding of classification of living things in Samia District,Kenya”. M.Sc Education Thesis, Masinde Muliro University of Science and Technology, 2011.
24. Joyce N. Ngakhala,” Extent of secondary school students’ Participation in biology practicals in Lugari,Kakamega County,Kenya. M.Sc Education Thesis,Masinde Muliro University of Science and Technology, 2011.
25. Khatete, I. “The Role of Education in Alleviation of Poverty Among the Urban Slum Dwellers.” M.Ed Thesis, Maseno University, 2000/2002.
26. Mitei, R.K. “The Efficiency of Military Distance Learning Program in Kenya.” M.Ed Thesis, Maseno University, 2000/2002.
27. Sika, J.O. “Relationship between Recurrent Expenditure and Performance in Secondary Schools in Siaya District, Kenya.” M.Ed Thesis, Maseno University, 2000/2002.
28. Barasa, N.E. “Analysis of Flow Trends of Students in Secondary School Education in Funyula Division, Busia District, Kenya.” M.Ed Thesis, Maseno University, 2001/2002.
29. Juma, G. “Wastage in Secondary Schools in Vihiga District, Kenya.” M.Ed Thesis Maseno University, 2001/2002.
30. Rugar, T.O. “Relationship between Education and Income Among Fishermen of Lake Victoria Landing Beaches in Rachuonyo District, Kenya.” M.Ed Thesis, Maseno University, 2001/2002.
31. Owiye, D. O. “Trend in and Factors Affecting Wastage in Primary Education in Siaya District, Kenya. M.Ed Thesis, Maseno University, 2005.
32. Thuo, O. M. “External Efficiency of University – Education and Training in Kenya universities: - Graduates “General Job Competencies in manufacturing industry” M.Ed Thesis, Maseno University, 2005.
33. Olel, M. “The Effect of Parallel Degree Programs on Efficiency and Equity in Public Universities in Kenya and Uganda.” Ph.D Thesis, Maseno University, 2002/2003.
34. Ndiku, J. “The impact of school – based management on Academic Performance in selected schools of Western Province, Kenya.” Ph.D Thesis, Moi University, 2005/06.

35. Musungu, L. L. "Role of the Headteacher in Academic Achievement in Secondary Schools in Vihiga District, Kenya" M.Ed Thesis, Maseno University, 2007.
36. Cheruiyot, M. K. "The Effect of Cattle Raiding Conflict on Primary Education in Kerio Valley Region, Marakwet District, Kenya" M. Ed Thesis, Maseno University, 2005.
37. Afullo, P.T.O. "Role of the Teacher in the Management of student Discipline in Public Secondary Schools in Bondo District, Kenya." M.Ed Thesis, Maseno University, 2005.

PUBLICATIONS AND OTHER OUTPUTS

Articles in Journals

1. Ngakhala, J.N, Toili, W.W, and Tsingalia, H (2017). Participation skills in Biology practical per class level in Lugari, Kakamega County, Kenya. *International Journal of Innovative Research and Development*, Volume 6 Issue 6, May 2017. ISSN 2278-0211
2. Sikolia, F.M, Toili, W. W, Sikolia, S. F and Owiti, D.S. O (2016). Extent of Use of Instructional Strategies in public secondary schools, Kakamega North sub-county, Kenya. *Journal of Research and Method in Education*, 6(3):60-77
3. Sikolia, F.M, Toili, W. W, Sikolia, S. F and Owiti, D.S. O (2017). Limiting Factors influencing implementation of SMASSE instructional strategies in teaching biology in Extent of Use of Instructional Strategies in secondary schools in Kakamega North sub-county, Kenya. *Journal of Research and Method in Education*, 7(1):69-82
4. Toili, E and Toili, W.W (2016) The Genesis of Kenya's 2008 Post Election Violence :An Analysis of Influence of Conflict Reports in the Media from 1982-2008 *Asian Academic Research Journal of Social sciences and Humanities* 3(8)
5. Shikuku, B.N, Toili, W.W, and Nyongesa, K (2015) Applications of Linear Programming Knowledge and Skills to Real Life Contexts by Secondary School Students in Kenya. *Journal of Scientific Research and Reports* 8(1):1-7
6. Marble N.Odhiambo, and **Toili, W.W** (2015), "Influence of instructional practices on students' achievement in mathematics in Secondary Schools in Kenya. *Journal of Education and practice*. Volume 26 (2015), 10-17
7. Marble N.Odhiambo, and **Toili, W.W** (2015), "The effect of instructional strategies on students' attitude development towards mathematics in Secondary Schools in Kenya. *International Journal of Management, Science and Technology*. Volume 3 Number 1 (2015), 12-18
8. Nabwire, J.L, Toili, W.W, Ong'unya R.O and Songok, J.R (2014) Influence of Teacher's Gender on Student Performance in Biology in Secondary Schools in Kenya. *International Journal of Advanced Research*, Vol.2, Issue 2, 178-186
9. Echessa, A.C.P, Nyambaka, H, Ondigi, N.A, Omuterema, S, **Toili, W**. et al (2013) Evaluation of micronutrients in seeds of pumpkin varieties grown by smallholder farmers in the Lake Victoria Basin. *African Journal of Food Science and Technology*, Vol.4(10), pp.221-228, December, 2013
10. Echessa, A.C.P, Nyambaka, H, Ondigi, N.A, Omuterema, S, **Toili, W**. et al (2013) Variation of Micronutrients in Pumpkin Fruit varieties grown within the Lake

- Victoria Basin. *Food Science and Quality Management*, Vol.17, pp.71-81, December,2013
11. Kevogo,N ,**Toili,W.**and Mutsoso,S(2013) Relationship Between Secondary School Students' Competence in Computer Use and Performance in Biology. *Asian Academic Research Journal of Social Science and Humanities*, Vol.1(17), pp.282-304, November, 2013
 12. Kevogo,N ,**Toili,W.**and Mutsoso,S(2013) Effect of General Computer Use on Secondary School Students' Performance in Biology. *Greener Journal of Computer Sciences*, Vol.1(1), pp.016-030, October 2013
 13. Ngakhala,J.N, **Toili,W.W.**, and Tsingalia, H (2013) "Extent of Secondary School Students' Participatirion in Biology Practicals in Kenya." *Asian Academic Research Journal of Social Science and Humanities* (forthcoming).
 14. Marble N.Odhiambo,and **Toili,W.W** (2013),"Implications of the use of Electronic Calculators on students' Performance in mathematics in Secondary Schools in Kenya. *African Journal of Education and Technology*. Volume 3 Number 1 (2013), 10-17
 15. Kevogo,N, Toili,W.W and Mutsotso.S.N(2013)"Influence of Class Size on Techniques of Teaching Science in Primary Schools of Vihiga County,Kenya". *International Journal of Educational Research and Review*.Volume 1(1) February,2013
 16. Barasa B.O M, Toili,W.W and China,S.S (2011)"Assessment of University Students' Vulnerability to Environmental Health Risks". *Sacha Journal of Environmental Studies*.Volume1 Number 2 (2011) 92-102
 17. Barasa B.O M, Toili,W.W and China,S.S (2011)"An Evaluation of University Students' Awareness of Environmental Health Risks and their Attitudes towards the Risks.". *African Journal of Education and Technology*.Volume 1 Number 3 (2011) 62-77
 18. Sulungai M.W, Toili W.W and Amadalo,M.M (2011), "Teacher related factors influencing the integration of information technology in the teaching of mathematics in secondary schools in Kenya". *African Journal of Education and Technology*.Volume 2 Number 1(2011),1-14
 19. Marble N.Odhiambo,and Toili,W.W (2013),"Implications of the use of Electronic Calculators on students' Performance in mathematics in Secondary Schools in Kenya. *African Journal of Education and Technology*. Volume 3 Number 1 (2013), 10-17
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 21. Akwee P. E, Toili,W.W and Palapala V.A (2012),"Effectiveness of computer based technology integration in teaching and learning of gene concept among high school students, Kenya. *European Journal of Biology and Health Education*. Volume 1 Number 1 and 2. July 2012, 31-52.
 22. Toili, W.W. (2006) Secondary School Students Participation in Environmental Action: Is it by Coercion or Dynamism? *Eurasia Journal of Science, Education and Technology*.
 23. Toili, W.W. (2002) Secondary School students' Perception of Environmental

- Quality in Bungoma District, Kenya. Maseno Journal of Education, Arts and Science. Vol. 3 No.1
24. Toili W.W (2008) Comparative analysis of Production practices and utilization of pumpkins by small holder farmers in Lake Victoria Basin. *African Journal of Environmental Science and Technology*
 25. Toili, W.W. (1996) Teaching for Community Environmental Action: An Alternative Instructional Model to Environmental Concepts and Issues in School. The Environmentalist 16(1), 221 - 229.
 26. Toili, W.W. (1994) A study of Children's' conception of chemical Reactions. Maseno Journal of Education, Arts and Science. Vol2 No.1 pg.1- 15.
 27. Toili, W.W. (1988) Promotion of Scientific Literary in Early Childhood Education: The Kenyan Experience. The Second International Symposium on Natural Sciences in Pre-School and Early Elementary Education Final Report, Portoroz. Yugoslavia
 28. Primary Science Series (6 Titles for Standards 1,2,3,4,6, and 7 pupils books) and Primary Science Teachers guides books 1 - 3, 6 and 7. Published by Kenya Literature Bureau.
 29. Toili, W.W. (1993) Twilight Intellectuals: Dons and Politics Equator News N0.4
 30. Toili, W.W. (1993) Vocational Education: A Doubtful Venture? Equator News 5
 31. Toili, W.W. (1994) Environment and the Child. Equator News No.6
 32. Toili, W.W. (1994) Culture, Environment and Development in Kenya. Equator News No.7

Abstracts in Conference Proceedings

- Toili,W.W(2013)**_Toili W.W (2013) Towards Quality Standards in Science Education in Kenya: Setting the Research Agenda for the Case of Secondary School Biology Curriculum. The 3rd Education Kenya Institute of Curriculum Development Symposium. January 23-24, 2013.
- Toili W.W. et al (2009)** A Comparative Study of University Students' Perception of Biotechnology Applications: The Case of Kenya, Turkey, Lebanon, Slovakia and Jordan. ESERA, Istanbul (August 30-4 Sept 2009).
- Toili,W.W(2009)** Towards Quality Standards in Science Education in Kenya: Case of Biology Curriculum in Secondary Schools. International conference on Education, Kenyatta University. 8-10 July, 2009.
- Toili, W. W. (2007)** Theory of Instruction in Environmental Education: Reflections on Action Research Pedagogy. Centre for Environmental Educations. Ahmedabad, India.
- Toili, W.W. (1988)** Promotion of Scientific Literary in Early Childhood Education: The Kenyan Experience. The Second International Symposium on Natural Sciences in Pre-School and Early Elementary Education Final Report, Portoroz. Yugoslavia.

Books Publication

1. Toili, W.W, Toili, E.W and Toili, M.E M (2019) Teaching Secondary school biology: a handbook for teachers in developing countries, Toili Educational Publishers, Nairobi.

2. William Toili, Emmanuel Toili, Mary Toili (2019) Environmental Education For Sustainability. Kindle Edition
3. Toili,E.W, Toili, W.W and Obua, H.(2021) Introduction to Political Science and Government. Independent Publishers, Nairobi.

CONFERENCES AND SEMINARS ATTENDED (LAST 5 YEARS)

1. March 25th -26th , 2021:Tom Mboya Labour college, Kisumu

Gained skills in curriculum development for university education covering areas such as global trends in curriculum review, overview of CUE guidelines in programme development, learning experiences in curriculum development and implementation, goals and expected learning outcomes in curriculum design, development and evaluation, modern technology and 21st century pedagogies in curriculum implementation, retooling academic staff in competency-based curriculum in higher education among others.

2. February 23rd 2021: Sheywe Guest House, Kakamega.

-Gained skills in innovative teaching practices, reflecting on education during and post-covid-19 pandemic

3. November 17th-18th, 2015: Lake Nakuru Flamingo Lodge, Nakuru

Gained skills in mechanisms of external peer review of universities with specific reference to Standards and guidelines for accreditation of universities in Kenya at the “*External Peer Reviewers Induction Workshop*”. The workshop was sponsored by the Commission for University Education.

4. April 8th, 2013-May 2nd 2013: Aaron Ofri International Training Centre, Jerusalem

Gained skills in mainstreaming “Education for Sustainable Development” in educational programmes through the one-month Seminar on “Education towards Sustainable Development: Training for Educational Personnel-Kenya”. The Training was funded by the Israel Government through the Israel Agency for International Development Cooperation, Ministry of Foreign Affairs.

5. March 24th-March 25th, 2011: Kenya School of Monetary Studies, Nairobi

Gained skills in mechanisms of external peer review of universities with specific reference to Standards and guidelines for accreditation of universities in Kenya at the “Stakeholders’ workshop on External Peer Review of Universities”. The workshop was sponsored by the Commission for Higher Education.

6. October 29th –October 30th, 2011: Kenya School of Monetary Studies, Nairobi

Gained skills in university strategic planning with a view to incorporating Stakeholders such as industries and the community at “Stakeholder Relations in Higher Education for Africa” workshop. The Workshop was sponsored by the Association of African Universities an Association of Universities and Colleges of Canada.

7. Bench marking for establishment of standards and guidelines for professional degree programmes in education in Eastern Africa Region at the workshop held at Zanzibar Ocean View Hotel, Zanzibar on **June 9-12, 2015**; under the auspices of Inter-University Council for East Africa
8. Toili, W.W (2014) Peer Review Mechanism for Universities in Kenya Commission for University Education Expectations.
Paper presented to Academic Staff Members of Masinde Muliro University of Science and Technology at the workshop on Curriculum Review held at MCU on 23rd-24th January, 2014
9. Toili W.W (2013) Towards Quality Standards in Science Education in Kenya: Setting the Research Agenda for the Case of Secondary School Biology Curriculum.
Paper presented at the 3rd Education Symposium held at Kenya Institute of Curriculum Development on January 23-24, 2013.
10. Toili W.W (2009) Towards Quality Standards in Science Education in Kenya: Case of Biology Curriculum in Secondary Schools.
Paper presented at the international conference on Education at Kenyatta held on 8-10 July, 2009.
11. Toili W.W. et al (2009) A Comparative Study of University Students' Perception of Biotechnology Applications: The Case of Kenya, Turkey, Lebanon, Slovakia and Jordan.
Paper presented at ESERA Seminar held in Istanbul (August 30-4 Sept 2009).
12. Toili W.W. (2007) Perspectives on Theory of Instruction in Environmental Education: Reflections on Action Research Pedagogy.
Paper presented at the 4th International Conference on Environmental Education, Ahmadabad, India (24 – 28th Nov. 2007).

COMMUNITY ENGAGEMENT/SOCIAL RESPONSIBILITY

Dec.2015-to date: Chairman Board of Management, Busakala High School, Bungoma County

April-May, 2013 : Successfully completed the Christian Pilgrimage in the Holy Land (Israel), and climbed to the top of the Masada off the Dead Sea.

2008-2010: Conducted sensitization talks in various secondary schools on strategies to improve performance in National examinations. The schools included Khasoko, Kolanya, Keveye and Nyang'ori as well as all Principals in Lugari District held at Magadi Girls' school.

2007-Date: Member, Marriage Encounter, East Africa Group

2001-Date: Vice-Chairman, University of Leeds Alumni Association in Kenya.

1994-1998: Member, Parents-Teachers Association Executive Committee, Maseno National School.

1993-2000: Secretary - General of the University of Leeds Alumni Association in Kenya.

1995-2000: Member, Administrative Committee Salvation Army Church (Kisumu Corps).

- 1986-1990:** Development of curriculum materials for the Undugu Society informal education programme for youths in Nairobi.
- 1987-1993:** Deputy Secretary - General, AFC Leopards Sports Club, Kenya.

MEMBERSHIPS OF PROFESSIONAL BODIES

- 2009:** Member, European Science Education Research Association
- 2008:** Member, National Association for Environmental Education (USA)
- 2008:** Member, National Environmental Education Foundation (USA)
- 2008:** Member, National Association of Biology Teachers (USA)
- 2007:** Member, Kenya Association of Natural History
- 1987-Date:** Member, Commonwealth Association of Science, Technology and Mathematics Education (CASTME) , London.
- 1988-Date:** Member, Association of Science for the Promotion of Children's Science in Africa" - Nairobi.
- 1991-2003:** Member, National Primary Science Panel of Kenya Institute of Education.

RESEARCH INTERESTS

Environmental education: curriculum development and implementation; Traditional and Modern strategies of environmental management; Person-environment relations; Education for Sustainable Development; Children's ideas in science and environmental concerns; Metacognitive abilities in science learning; Quality Assurance and Standards in Science Education; Transformative teaching and learning

REFEREES

1. Dr.Maurice Amadalo,
Masinde Muliro University of Science and Technology,
P.O. Box 190,
KAKAMEGA.
2. Prof. A. M Simiyu,
Masinde Muliro University of Science and Technology,
P.O. Box 190,
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3. Dr. J.W. Nasongo
Masinde Muliro University of Science and Technology,

P.O Box 190
KAKAMEGA

4. Prof. Shem O. Aywa,
Deputy principal,
Kibabii University College,
P.O. Box 1699-50200,
BUNGOMA.

5. Dr. Sephen Sikolia Fedha,
Maseno University,
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