

Curriculum Vitae

Personal Information

Name: Ong'unya Rafael Odhiambo
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Nationality: Kenyan

Educational Qualification

- i. PhD in Evaluation of Educational Programmes and Projects: Maseno University: 2005-2009
- ii. Master of Education: Kenyatta University 2002-2004
- iii. Postgraduate Diploma in Education (Agriculture Education): Moi University: 1998-1999
- iv. Bachelor of Science in Agriculture: Egerton University: 1990-1995

Employment History

Employer	Designation	Year
MMUST	Senior Lecturer	2016 to Date
MMUST	Lecturer	2010-2016
T.S.C	Teacher	1996-2010

Researches and Publications

Influence of Teachers' knowledge Competency on Pupils' academic Achievement in Kisumu County, Kenya (February, 2021).....European Journal of Education Studies. By Nyanjom Anolyce Omondi; Dr. Yambo J.M.O and Ongunya Rafael O.

Influence of Teachers' Assessment Competency on Pupils' Academic Achievement in Kisumu County (November, 2020). **ISSN 2523-2223 (online). Journal of Advances in Education and Philosophy.** By Nyanjom, Anolyce omondi; Dr.Yambo J.M.O and Ongunya, Rafael O.

Social Intelligence in Education and Implications for Sustainable Development (2020) **ISBN 978-9966-116-58-1; Dynamics of Sustainable Development in Africa; Centre For Democracy, Research and Development (CEDRED), Nairobi-Kenya.** By Joanne Nabwire Lyanda; Raphael Odhiambo Ongunya and Aggrey Mukasa Simiyu.

Prospects and Potential in Problem-Based Learning: a Transformative Instructional Approach in 21st Century for sustainable Development (August, 2020); **ISBN 978-9966-116-64-2; Discourses on Sustainable Development in Africa.** By Omollo, David Otieno; Joanne Nabwire Lyanda and Dr. Raphael Ongunya.

Inclusive Education and the Less Restrictive Environment Provision for Special Needs Learners in Schools (July, 2019). **ISBN 978-9966-116-67-3; African Interdisciplinary Studies association.** By Joanne Nabwire Lyanda and Raphael Odhiambo Ongunya.

Situational Analysis of Supervision on the Implementation of early Childhood Education in Selected Public pre-schools in Homa-Bay sub-County, Kenya (June, 2018). ISSN: 2394-4404; International Journal of Innovative Research and Advanced Studies. **Vol.5, Issue 6. Available online at: www.ijiras.com. By Ajuoga, Milcah Aoko and Ongunya Raphael Odhiambo**

Influence of Problem Solving Approach on Gender differences in mathematics achievement in Vihiga County, Kenya (April, 2018). ISSN 2394-9686; International Journal of Novel Research in Education and Learning. **Vol.5, Issue2 (pp.59-82). Available at: www.noveltyjournals.com. By Mutange Ronald Ellumbe; Dr. Ong'unya Raphael and Prof. Amadalo Maurice Musasia**

Financial Determinants of Educational Resources Management for enhancing Students' Performance in Secondary Schools in Vihiga County, Kenya (August, 2016). IJRDO-Journal of Applied Management Science; ISSN: 2455-9229. Vol. 2(8); Paper-435. By Caroline Ayoti; Dr.Grace Koteng'; Dr. Raphael Ongunya Odhiambo.

Determinants of Information and Communication technology adoption in Teaching and Learning among Early Childhood Development and Education Schools in Kisumu County (September, 2016). ISSN 2394-4404; International Journal of Innovative Research and Advanced Studies. **Vol. 3, Issue 10, pp: (10-20). Available at: www.ijiras.com. Ajuoga, M.A; Ong'unya, R.O and Mbugua, C.M.**

Project based Learning on Students' Performance in the Concept of Classification of Organisms among Secondary Schools in Kenya (June, 2016). ISSN 2222-1735 and ISSN 2222-288x (Online). Journal of Education and Practice **Vol.7, No. 16, 2016. Available Online @Www.Iiste.Org. By Wekesa, Noah Wafula and Ongunya, Raphael Odhiambo**

Teacher Competence as a Determinant of Computer-Based Instruction in Secondary School Biology in Teso South sub-County, Kenya (May, 2016). ISSN: 2408-770x (Print) And ISSN: 2408-6231(Online). Journal of Educational Policy and Entrepreneurial Research **Vol.3, No. 4, 2016. Pp 83-91. Available @Www.Ztjournals.Com. By Omaset, J.O.; Ongunya, R.O and Edome, P.A**

The Plastic Waste Menace in Kenya: A Nairobi City Situation (April, 2014). ISSN 0975-833x. International Journal of Current Research: **Vol. 6 (04); Pp.6175-6179. Available Online @[Http://Www.Journalcra.Com](http://Www.Journalcra.Com). By Ong'unya, Raphael Odhiambo; Aurah, Catherine Musalagani, Nabwire Joanne Lyanda and Songok, Jepchirchir Ruth.**

The Discrepancy between the Expected HIV and Aids Education Programme Content and the Content offered to Kenyan Secondary School Youth (March, 2014). ISSN 2320-5407: International Journal of Advanced Research; **Vol.2 (3); Pp.833-840. Available Online: [Htt://Www.Journalijar.Com](http://Www.Journalijar.Com). By Ongunya, R.O; Nabwire, J.L; Amollo, J.W.A and Songok, J.R.**

Trends in ICT Adoption in Education: A Case of E-Learning among Universities in Kenya. *In Africa And The Challenges Of Globalization- Opportunities And Prospects*. (Edited By Amutabi, M. N., 2014). ISBN: 978-9966-015-68-6. Pub.: Research, The Catholic University of Eastern Africa (CUEA), Nairobi, Kenya and Aidal, Nairobi, Kenya. By Nabwire Joanne Lyanda; Ongunya Raphael Odhiambo and Songok, Jepchirchir Ruth

Credit Accumulation and Transfer System Education – Early Childhood Development Education For Undergraduate. Nairobi, Kenya (**June, 2012**). ISBN: **978-9966-009-12-8**. Available Online At [Www.Cue.Or.Ke](http://www.cue.or.ke). Toili William; Ruth Otunga; Ong’unya Rafael Odhiambo and Tonui Betty C.

Conservation Agriculture Progress in Kenya (2010). Available On-Line At: [Http://Conservationagriculture.Org](http://Conservationagriculture.Org). By K’Owino Isaac, Ongunya R.O and Grace Mwango

Objectives and Actual HIV and Aids Education Programme in Siaya District Secondary Schools (2009). ISSN 1990-3839(Err.V4(4) PP.173-182). Available On-Line At: [htt//Www.Academicjournals.Org/Err](http://Www.Academicjournals.Org/Err). By Ong’unya R.O; Indoshi F.C and Agak, J.O

Books and Book Chapters Published

Prospects and Potential in Problem-Based Learning: a Transformative Instructional Approach in 21st Century for sustainable Development (August, 2020); ISBN **978-9966-116-64-2**; **Discourses on Sustainable Development in Africa.**

Inclusive Education and the Less Restrictive Environment Provision for Special Needs Learners in Schools (July, 2019). ISBN **978-9966-116-67-3**; **African Interdisciplinary Studies association.**

Trends in ICT Adoption in Education: A case of E-Learning among Universities in Kenya. In **Africa and the Challenges of Globalization-Opportunities and Prospects** (Edited by Amutabi, MN, 2014). ISBN: 978-9966-015-68-6. Pub: Research, The Catholic University of Easter Africa (CUEA), Nairobi and Aidal, Nairobi, Kenya.

Credit accumulation and Transfer System in Education-Early Childhood Development Education for Undergraduate. Nairobi, Kenya (2012). ISBN: **978-9966-12-8**. Available online at www.cue.or.ke.

Challenges Head Teachers face in the Implementation of Free Primary Education in Ukwala Location, Kenya (2004). Available online at Ir-Library.Ku.Ac.Ke/Handle/123456789/2567

Conference Presentations

On-Line In-service Training (INSET) For Secondary School Science Teachers: Challenges and Opportunities (November, 2020): MMUST International Virtual Conference.

Prospects and Potential in Problem-Based Learning: a Transformative Instructional Approach in 21st Century for sustainable Development (Virtual conference held in Multi-Media University, August, 2020); **Discourses on Sustainable Development in Africa.**

Inclusive Education and the Less Restrictive Environment Provision for Special Needs Learners in Schools (held in Multi-Media University, July, 2019); **African Interdisciplinary Studies association.**

Primary Education and National Development: Second Annual International Conference **in Kisii University, Eldoret Campus, June, 2015.**

Community involvement in Forest management for sustainable Peace building in Mau Complex: An implication for Conflict Resolution in Kenya. **MMUST International Security Conference, June, 2015.**

Community Involvement in Forest Management for sustainable Peace Building in Mau Complex: An implication for conflict Resolution in Kenya. **MMUST International Security Conference, June, 2015.**

Trends in ICT Adoption in Education: A case of E-Learning among Universities in Kenya. In **Africa and the Challenges of Globalization-Opportunities and Prospects. First Annual International Conference in Kisii University, Main Campus, July-August, 2014.**

Determinants of Information and Communication Technology adoption in Teaching and Learning among Childhood Development and Education in Schools in Kisumu County, Kenya. **International Conference in Kabarak University, June, 2014.**

Continuing Researches and Projects

An Academic Committee member of Inclusive Home-based Early Learning Project (iHELP): a collaborative Project among three Universities: MMUST (Kenya), Kyambogo (Uganda) and Zibmbwe (Zimbabwe). The Project is jointly funded by: International Development Research Centre and Global Partnership for Education. The project seeks to increase access to early child education (ECE) among marginalized communities.

Research Team Member of GAISER Research Project which seeks to establish gender analysis and inclusion in STEM Education and Research for institutional Transformation to strengthen women's leadership in STEM education. The project is funded by MMUST's Directorate of Research and Postgraduate Students Support.

Research Team member on Training needs for Retooling skills of Teachers of Physical education in Western Kenya Region for effective Implementation of CBC in Junior Secondary Schools.

Supervisor in PhD student Research on the “Effects of Teacher’s use of 5E Instructional Model on Secondary School Students’ Achievement in Biology in Vihiga County, Kenya by Alice Nabile in the department of Science and Mathematics Education.

Seminars, Workshops and Academic Conferences Attended

Peer Reviewers Training workshop on Automation of the Commission’s Processes held in Naivasha on 14th to 15th February, 2022 courtesy of Commission for University Education.

Programme Evaluation workshop held in Naivasha on 16th to 19th February, 2022 courtesy of Commission for University Education.

Curriculum Review and Development workshop held in Tom Mboya College on 25th – 26th March, 2021 courtesy of MMUST. Theme: Redefining Academic Programmes’ Review and Development for Global Competitiveness.

School or Education workshop held on 23rd February, 2021 in Sheywe Guest House. Theme: Innovative Teaching Practices, Reflecting on Education during and Post- Covid-19 Pandemic.

Developing Competency based Science Curriculum in Kabarak University from May 22nd to June 11th, 2020 courtesy of KICD in Kenya.

Developing Competency based Science Curriculum in Machakos University from August 16th to September 2nd, 2019 courtesy of KICD in Kenya.

Editing of Teacher Training manual for grade 4 Science and Technology at Masada Resort in Naivasha from July 10 to 15th, 2019 courtesy of KICD in Kenya.

University multiplication training workshop on Curriculum Development and Review for public Universities in Kenya: Implementation and Accreditation held in MMUST-KAKAMEGA, Kenya. From 23rd to 24th January, 2014.

Bioethics Training Workshop: Kakamega Golf Hotel, Kakamega County. Sponsored By The Global Health Research Initiative/International Development Research Centre. Conducted By Kavi-Institute Of Clinical Research (Kavi-Icr) In Collaboration With The National Commission For Science Technology And Innovation (NACOSTI); **16th -17th October, 2014.**

Joint drafting workshop for Credit Accumulation and Transfer System by Commission for Higher Education on 4th to 6th October, 2011 at Masinga Dam Resort in Masinga District.

Fundamentals of web applications organized by directorate of Information and communication held in MMUST from 18th to 19th May, 2010.

Postgraduate Student Supervision

i) Theses Supervised to Completion

Influence of Teacher's Competencies on Pupils' Academic Achievement in Primary Schools in Kisumu County (November, 2021). A Doctor of Philosophy in Curriculum and Instruction by Nyanjom, Anolyce omondi; Kisii University.

Problem Solving Teaching Approach and its Influence on Secondary School Students' achievement and Self-concept in Commercial Arithmetic in Kenya (A **PhD Thesis by Ronald Mutange, MMUST, 2019**).

Project Based Learning Technique on Students' Achievement in the Concept of Classification of Organisms among Secondary Schools in Kenya (A **Master Thesis by Noah Wafula Wekesa, Mmust, 2016**).

Teacher-Related Determinants for affecting Integration of Computer-Based Instruction in Biology in Teso South Sub-County, Kenya (A **Master Thesis by John Ogwane Omaset, Mmust, 2016**).

Integrating Information Communication Technology in Learning of Cell Biology in Secondary Schools of Nandi South Sub County, Kenya (A **Master Thesis by Wellyter Chebet Mibei, Mmust, 2015**).

Implementation of Strengthening Mathematics and Science in Education Programme in Teaching of Biology in Secondary Schools in Kenya (A **Master degree Thesis by Antony Sifuna Bwasi, MMUST, 2015**).

Computer Programmed Instruction on Students' Mathematics performance in Kenyan public Secondary Schools (A **Master Thesis by Benard Wekullo, MMUST, 2014**)

Determinants of Learning Evolution among high School Students in Kakamega central sub-County, Kenya (A **Master Thesis by Kosasasia A.J, 2014**).

ii) On-going Student Supervision

Effects of Teacher's use of 5E Instructional Model on Secondary School Students' achievement in Biology in Vihiga County, Kenya. A PhD research work by Alice Nabie in the department of Science and Mathematics education, School of Education, MMUST.

Application of electronics practical workbench and its influence on academic achievement among form three physics students in Nairobi County, Kenya. A PhD research work by Alphayo Abacha Ocholla Nabie in the department of Science and Mathematics education, School of Education, MMUST.

Determinants of Educational Technology adoption in Instruction and its influence on Students' Academic Achievement in Kakamega County, Kenya. Educational Resource utilization and management and their influence on Students' performance in Secondary Schools in Vihiga County, Kenya. A PhD research work by Joanne Nabwire Lyanda, Kisii University.

Educational Resource utilization and management and their influence on Students' performance in Secondary Schools in Vihiga County, Kenya. A PhD research work by Caroline Ayoti, Kisii University.

Academic Leadership

i) Appointments

- a) MMUST Curriculum Review and Development Member (2021 to Date)
- b) **Chairman of Department:** Science and Mathematics Education Department, School of Education (**June, 2017 to Date**).
- c) **School of Education Research Committee Member (April, 2017)**
- d) **Acting Chairman of Department:** Science and Mathematics Education Department, School of Education (**February, 2017 to April, 2017**).
- e) **School Postgraduate Studies Coordinator (2013 to 2017)**
- f) **Zonal Coordinator School Attachment, Kapsabet Zone: (2015 to 2017).**
- g) **School Postgraduate Studies Coordinator: School of Education (2015 to 2017).**
- h) **Acting Coordinator Kakamega Town Campus (11th July to 29th July, 2016)**
- i) **Faculty of Education and Social Sciences Postgraduate Studies Coordinator (2015 to 2017).**
- j) **Acting Chairman of Department:** Science and Mathematics Education Department, School of Education (**September, 2014 to January, 2015**).
- k) **Steering Committee member on the Establishment of the proposed Banga Campus in Busia County (2014)**
- l) **Departmental Examination and coordinator:** Science and Mathematics Education Department, School of Education (**2013 to 2015**).
- m) **Departmental Postgraduate Studies coordinator:** Science and Mathematics Education Department, School of Education (**2011 to 2013**).

ii) Theses Examined

SMASSE Active Learning Activities and their Influence on Students' Achievement in Secondary School Mathematics in Baringo County, Kenya. A master of mathematics Education Thesis by Wanjala M Protus (2021).

An investigation of preparation of pre-service biology teachers in content knowledge, technological and pedagogical skills: case of universities in Kenya. **A PhD in Science Education Thesis by Electine Mbatu Atieno (2020).**

Effect of Integrating Micro-science kits in Secondary School physics experiments by Fanuel Murundi M.W (2020). **A PhD in Science Education thesis of MMUST.**

Effects of Multiple Instructional Approaches on Secondary School Students' Learning Outcomes in Chemistry in Vihiga County (2019). **A PhD Thesis by Granja W.M**

Influence of Selected Teacher Instructional Strategies on Students' Learning Outcomes in Mathematics in Secondary Schools of Mumias sub-County, Kakamega County, Kenya (2016). **A PhD Thesis by Marblen Odhiambo Nandwa.**

Assessment- based learning and its effect on Achievement in Learning the Mole Concept among secondary school students in Kenya by Silvanus M. Luchera, (2014). **A Master of Science Education thesis of MMUST.**

Programmed instruction and its effect on Students' performance in the Structure of Atom and Periodic Table among Secondary Schools in Kenya by Masinde J.W (2014). **A Master of Science Education thesis of MMUST.**

Effect of Computer-based Instruction on Kenyan Secondary School Students' learning Outcomes on Mathematical Probability Concepts by Wasike Dancun W. (2013). **A PhD thesis in Mathematics Education of MMUST.**

Secondary School Teachers' Perception of the Philosophical Foundations of Environmental Education for Sustainability in Kakamega North District, Kenya by Songok Ruth Jepchirchir (2013). **A Master of Science Education in environmental education thesis of MMUST.**

Factors affecting Secondary School Students' performance in Biology in Mumias district by Electine A.M (2013). **A Master Science Education thesis of MMUST.**

Utilization of Science process skills in explaining Physics Experimental data by Evelyne Lucia Shitiavai (2013). **A Master of Science Education thesis of MMUST.**

Implementation of Strengthening Mathematics and Science in Secondary Education (SMASSE) program and Mathematics Teachers' instructional Practices in Mumias district, Kenya by Mercy Luvai (2013). **A masters of Mathematics Education of MMUST.**

Assessment of extent Plastic Bag Waste Management Methods used in Nairobi City to Promote Sustainability by Catherine Musalagani Aurah (2011). **A Master of Science Education Thesis in Environmental Education of MMUST.**

Effect of using Molecular Models on Students' Understanding of Structure and Bonding in Kenyan Public Secondary Schools, by Wycliffe Garanja Mulavu (2011). **A Master of Science Education Thesis in Chemistry Education of MMUST.**

Community Service

Site inspection of Kibabii University by the Programme Panel of the Commission for University Education (5th April, 2022).

Course material evaluation of grade 7 CBC integrated Science Curriculum between 17th – 31st March, 2022 in Naivasha, courtesy of KICD.

External examination in the department of Curriculum, Instruction and Media, School of Education, Moi University between 19th – 25th January, 2022.

Appointed **a member of the board of management in Bliss Brite Junior School** for 3 years from January, 2021 to January, 2024.

Evaluation of Course Materials for grade 5 in Science and Technology for KICD in June, 2020.

Curriculum Scope and Sequence development for Competency Based Curriculum in Integrated Sciences for grade 7, 8 and 9, courtesy of Kenya Institute of Curriculum Development (KICD) from 18th August to 2nd September, 2019.

Evaluation of the proposed curriculum for PhD in Early Childhood Development Education of Kisii University in January, 2017 for the Commission for University Education.

Site inspection of Scott Christian University by the Programme panel for academic resources verification in September, 2016 for the Commission for University Education.

Evaluation of the proposed curriculum for Master in Early Childhood Development Education of Kisii University in March, 2016 for the Commission for University Education.

Evaluation of the proposed curriculum for Bachelor of Education in Early Childhood Education of Sacred Heart University College-Nyeri in April, 2015 for the Commission for University Education.

Africa brotherhood church university: the proposed bachelor of education in early childhood education (2015) for CUE.

Mount Kenya University: **The proposed Bachelor of Education in Early Childhood Studies** (2015) for CUE.

Mount Kenya University: The proposed Master of Education in Early Childhood Studies (2015).

Scott Christian University: The proposed Curriculum for the Postgraduate Diploma in Education ECDE (2015) for CUE.

Scott Christian University: Bachelor of Education in Early Childhood Education (2015)

Kenya College of Accountancy University: The proposed Bachelor of Education Early Childhood Education (2014) for CUE.

The proposed curriculum for Bachelor of Early Childhood Development Education of the East African University (2014) for CUE.

The proposed Bachelor Education degree curriculum in Early Childhood Development Education of Inter-Christian Fellowships University (2013) for CUE

The proposed Bachelor of Arts in Child and Youth Studies of Tangaza College Institute of Youth Ministry (2013) for CUE.

The proposed Bachelor of Education in Early Childhood Development Education of Riara University (2013) for CUE.

Areas of Specialization

- i) Curriculum Evaluation
- ii) Agriculture Education
- iii) Environmental Education
- iv) Educational Research

References

Prof. Moses W. Poipoi

Associate Professor of Educational Psychology &
Dean School of Education,
MMUST, Kenya.

Prof. Peter Odera

Associate Professor of Education Psychology, Department of Education Psychology, school of Education, MMUST, Kenya.

Prof. Owiti Dickson Ondiek

Associate Professor of Mathematics Education, Department of Science and Mathematics, School of Education, MMUST, Kenya.

Prof. Judah Ndiku,

Director of University Curriculum Review and Development
MMUST, P.O Box 190-50100, Kakamega.

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