

CURRICULUM VITAE (CV)

DR. AINEAH WANG'ANYA WAMBASI (PhD)

Personal Profile:

Personal Details

Name: DR. Aineah Wang'anya Wambasi (PhD)

Title/Qualification: Lecturer/PhD

Department: Educational Communication and Technology

Designation/Position: LECTURER

Email: aineah.wambasi@ku.ac.ke

Contact Address: BOX 1708-50205, WEBUYE
(KENYA)



Area of Specialization:

-Ph.D.: EDUCATIONAL COMMUNICATION AND
TECHNOLOGY (ECT)

-M.PHIL.: BIOLOGY EDUCATION

Research Interests:

- STEM education integration
- Competency-based teacher education
- Teacher professional development
- Digital learning environments
- AI in education
- -Science Education Pedagogy
- -Instructional Media and Technology

Google Scholar: Has an Extension to Kenyatta University

ORCID ID: 0000-0003-0776-9464

Academic & Professional Qualifications:

- i. **2018: Moi University (MU)**
- ii. **Course:** Doctor of Philosophy (PhD) degree in Educational Communication and Technology (ECT).
- iii. **2008: Moi University (MU)**

- iv. **Course:** Master of Philosophy (**M.Phil.**) in Educational Communication and Technology (Biology Education)
- v. **1998: Jomo Kenyatta University of Agriculture and Technology (JKUAT)**
- vi. **Course:** Bachelor of Science (**B.Sc.**) (Biochemistry/Chemistry)
- vii. **1986: Kenya Science Teachers College (KSTC).**
- viii. **Course:** Diploma in Education (**Dip. Ed**) (Science Education)-(Biology; Chemistry and P.E)

Employment History:

Kenyatta University (KU):

Period: February 24, 2023—To Date

Lecturer in:

-Bachelor of Education and Post-Graduate

COURSES:

- ECT 211 Contemporary Pedagogies in Teacher Education
- ECT 213 Teaching Practicum
- ECT 304 Biology Methods
- ECT 340: Instructional Research and Practice
- ECT 344 Biology Methods
- ECT 708 Biology Methods
- ECT 823 Foundation of Science Education
- ECT 825 Nature, Aims and Methods of Teaching Biology
- ECT 826 New Trends in Biology Education

Supervision of post-graduate students Both at Masters and PhD levels.

- i. **Masinde Muliro University of Science and Technology (MMUST):**

Period: September 2022—2025

Position: Lecturer in:

Doctor of Philosophy (PhD)

Course: -CIT 901: Comparative Educational Technology

- ii. **Alupe University (AU):**

Period: January 2020 -- 2023

Position: Lecturer in:

-Bachelor of Education (Arts and Science)

Courses:

- CIM 210: General Methods of Teaching
- CIM 211: Educational Media and Resources
- CIM 221: Biology Methods 1
- CIM 321: Biology Methods 11 3
- CIM 360: Educational Media Practical and Micro-Teaching
- ZOO 200E: Systematics and Taxonomy (PLANTS)
- BOT 203E: General Genetics and Evolution

Post-Graduate Diploma in Science Education (PGDE)

Course:

- CIM 712: Instructional Technology
- CIM 721: Special Methods in Biology

iii. Kibabii University (KIBU)

2014– To Date:

Lecturer of Bachelor of Education (Arts and Science) (Part-Time)

Courses:

- CUT 222: Curriculum Studies
- ESM 113: Survey of Animal Kingdom
- SZL 123: Fundamentals of Ecology
- SBT 111: Survey of The Plant Kingdom
- ESM 321: Biology Education
- EDF 410: Sociology and Comparative Education
- EDD 008 Educational Technology
- CIT 210 Instructional Methods and Strategies
- CIT 211 Educational Media and Resources

-Master in Education (M. ED)

Courses:

- CUT822: Management of Educational Media Resources
- CUT826E: Information Communication and Technology in Education
- CUT 814: Curriculum and Instruction
- CUT 817E: Curriculum Measurement

- CUP 8310: The Evaluation of Curriculum and Instruction
- CUT 8320: Designing and Developing Education Media
- ESM 833: Environmental Physiology School Operations.

iv. Moi University (MU):

Period: August 2010 – 2019

Position: Lecturer in:

-Bachelor of Education (Early Childhood and Primary Education)

Courses:

- EPÉ 100: Introduction to Science (Physical Science)
- EPE 201: Biological Science
- EPE 220: Physical Science
- EPE 314: Methods of Teaching Science in EPE

-Bachelor of Education (Science Education)

Course:

- CIM 321: Biology Methods

-Post-Graduate Diploma in Science Education (PGDE)

Course:

- CIM 721: Biology Methods

- Diploma in Early Childhood & Primary Education (DECPE)

Courses:

- DCE 006: Science Activities
- DCE 023: Health, Food, Nutrition and Care
- DCE028: Child Protection and Care
- DCE 035: Methods of Teaching Science in ECPE

Achievements:

Academic/Professional Scholarships

- i. **1984:** Full sponsorship to: Kenya Science Teachers College (KSTC)- to pursue a Diploma in Education (Science), Ministry of Education.
- ii. **1994: Study leave by TSC with pay to:** Jomo Kenyatta University of Agriculture and Technology (JKUAT)- to pursue a Bachelor of Science (B.Sc.) (Biochemistry and Chemistry)
- iii. **2004: Study leave by TSC with pay to:** Moi University (MU)- to pursue Master of Philosophy (M.Phil.) in Biology Education

Publications:

- i. **Article 6: Availability and Accessibility of Computers and ICT Resources in Teaching and Learning Chemistry in Secondary Schools in Nyamira County, Kenya .** **Authors:** Bethuel Misati Momanyi., Grace N. Orado., Aineah W. Wambasi
Kenyatta University, Kenya **Journal:** *INTERNATIONAL JOURNAL OF RESEARCH AND INNOVATION IN SOCIAL SCIENCE (IJRISS)* ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue XI November 2025 DOI: <https://dx.doi.org/10.47772/IJRISS.2025.91100312> Received: 01 December 2025; Accepted: 05 December 2025; Published: 09 December 2025
- ii. **Article 5: Impact of Integrating Basic Science Process Skills on Students' Performance in Biology Practical in Vihiga County, Kenya.** **Authors:** Kadenyi Mercy Osotsi, **Dr. Wambasi Aineah Wang'anya**, Dr. Michael Muchoki Waititu
Journal: *International Journal of Research in Social Science and Humanities (IJRSS)*, Vol. 6 No. 1 (2025)
- iii. **ARTICLE 4: Teachers' Preparedness to Integrate Three-Dimensional Computer Animation in Teaching DNA Replication in Public Secondary Schools in Murang'a County, Kenya.** **Authors:** Jack Muchiri Mwangi, **Dr. Wambasi Wang'anya Aineah**, Dr. Michael Muchoki Waititu. **Journal:** *Reviewed Journal International of Education Practice*, Vol. 6 No. 1 (2025)
- iv. **ARTICLE 3: A Comparison of Mathematics Achievement of Learners Who Learned Using Peer Tutoring Strategy and Those Who Learned Without Using Peer Tutoring.** **Authors:** Iyamurenge Regis, Florence K. Nyamu, **Aineah W. Wambasi** **Journal:** *International Journal of Research and Innovation in Social Science (IJRISS)*, Vol. 8, Issue 12, 2024
- v. **ARTICLE 2:** Wambasi, W., A., (2017). Changing Paradigms in Teaching of Practical in Biology in Selected Secondary Schools in Kakamega County of Western Kenya: A Case of Digital Educational Technology Media Resources *International Journal of Sciences: Basic and Applied Research (IJSBAR)* Vol. 36 (1) pp 49-78.
- vi. **ARTICLE 1:** Wambasi, W., A., (2017). The Teaching of Practical Biology in Selected Secondary Schools in Kakamega County of Western Kenya: A Case of Digital Educational Technology Media Resources. *International Journal of Sciences: Basic and Applied Research (IJSBAR)* Vol. 35 (3) pp 310-336.

Referred Journals

- i. *International Journal of Research and Innovation in Social Science (IJRISS)*, Vol. 8, Issue 12, 2024
- ii. *Reviewed Journal International of Education Practice*, Vol. 6 No. 1 (2025)
- iii. Core Publishers | Open Access Publisher
- iv. *International Journal of Sciences: Basic and Applied Research (IJSBAR)*
- v. LAP LAMBERT Academic Publishing (November 14, 2012), BOOK

Books and Books Chapters:

Books Chapters:

1. A Guide to:

Conducting, Reporting and Disseminating Research in Social Science

Authors

Grace N. Orado

Francis G. Mwangi

Aineah W. Wambasi

Naomi W. Mbacho

Damaris A. Shihundu

Books:

3. Wambasi, Wang'anya Aineah, Bo Ning, (2026). *Teachers For STEM: STEM As a Pedagogy for Instruction – (A Textbook in Progress)*

(Dr Aineah Wang'anya Wambasi-Kenyatta University- Kenya:

Prof. Dr Bo Ning -UNESCO: Shanghai Normal University – China):

2. Wambasi, Wang'anya Aineah (2026). *BIOLOGY EDUCATION: Essentials of Educational Statistics* (In progress)

1. Wambasi, Wang'anya Aineah (2012). *Learning of Genetics and Evolution: Student's prior incoherent ideas and perceptions*. Publisher- Lambert Academic Publishing: AV Akademikerverlag GmbH & Co. KG Heinrich-Bocking STR. 6-8, 66121, Saarbrücken, Germany. ASIN: 3659282715

Publisher: LAP LAMBERT Academic Publishing (November 14, 2012)

Language: English

Paperback: 120 pages

ISBN-10: 9783659282713

Conference/Workshops/Seminar Papers:

- i. **4-10-2024:** Left **Nairobi-Kenya** Airport for **The People's Republic of China** Conference of Teachers for STEM.
- ii. **6-10-2024:** Arrived at **UNESCO** University: **Shanghai Normal University (SNU)** - China.
- iii. **8-10-2024:** Registration at Shanghai Normal University Conference of Teachers for STEM.
- iv. **9-10-2025:** Opening ceremony at Shanghai Normal University Conference of Teachers for STEM.

International Trends in STEM Education:

1. STEM Education in Malaysia
 2. Implementation of STEM Education in The Maldives
 3. Shaping the Next Generation: The Role of STEM in Uzbekistan's Education System
 4. Transforming STEM Teacher Education in Tanzania: Challenges, Initiatives, and Reforms for Quality Enhancement.
 5. Professionalising Teacher Education to Advance Quality STEM Education.
 6. Engineering Education in China
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- i. **10-10-2025:** Arrival in Chengdu: STEM Senior Seminar and Exchange Activity for Education Administration of BRI Partner Countries- Sub-venue of the Experimental Primary School Attached to UESTC.
 - ii. **Sponsored by:** UNESCO Teacher Education Centre Chengdu Education Research Institution.
 - iii. **Organised by:** Chengdu District Education Bureau-Experimental Primary School attached to UESTC
 - iv. **16-10-2024: Joint Forum between UNESCO and OOF-TAS Collective:** STEM Teachers' Readiness and Professional Development.
 - v. **17-10-2024: Youth Science and Technology Activity.**
 - vi. **18-10-2024:** Academic Dialogue: Typical Models in STEM Teachers' Pre-Service Training.
 - vii. **19-10-2024: Workshop:** STEM Education's Experience of Luohu District, Shenzhen
- Policy and Strategy for STEM Education Innovation in Luohu District, Shenzhen
 - viii. **20-10-2025:** Findings from TALIS TVS Study on Teachers' Teaching Practices in Mathematics

- ix. **22-10-2025:** Left **Shanghai Normal University (SNU)** -China for Nairobi, Kenya, after the conference of Teachers for STEM
- x. **2019: KAEAM 2019 SYMPOSIUM:** Held at Jumuia Conference Center, **NAKURU** from 2nd to 4th October 2019. THEME: Educational Reforms for Sustainability.
- xi. **Workshops Attended:**
- xii. **2023:** A Training on Gender Mainstreaming into the Curriculum; at the Centre for Gender Equity and Empowerment, Kenyatta University.
- xiii. **2022:** Alupe University College, School of Education and Social Sciences, “Teaching Practice Students Induction Workshop” held on July 6th, 2022,
- xiv. **2021:** Alupe University College, School of Education and Social Sciences, “Teaching Practice Students Induction Workshop” held on July 8th, 2021.

Seminars Attended:

- i. **2023:** Webinar Seminar on PhD Supervising and Being Supervised
- ii. **2023:** PhD/PG Supervision Webinar Writing Research Framework (Theoretical, Conceptual and Analytical)
- iii. **2023:** Webinar Writing Research Publications and Supervision models
- iv. **2021:** Examination Management Process Seminar. Theme: “Quality and Integrity in the Examination Marking Process”. Held on 10th February 2021, Alupe University College.
- v. **2021:** Alupe University College, School of Education and Social Sciences, Seminar on “Examination management process” held on July 8th, 2021.
- vi. **2020:** E-Learning Course Management Training. Theme: “Instructional Design, Digital Content Development, Delivery and Management”. Held on 15th September, 2020, Alupe University College.

Supervision of Undergraduates and Postgraduate Students:

Supervision of Undergraduates on Teaching Practicum

Teaching Practicum 1&11

Masters:

Masters Students Under Supervision (Graduated & In Progress):

S/No.	REG. No.	NAME	STATUS	REMARKS
1	E55/20697/2012	Njeru Calbert Munene	Proposal 28/8/2023	GS proposal
2	E55/CE/20090/2012	Maringa John Kariri	GS 23/10/2025	AT GS

S/No.	REG. No.	NAME	STATUS	REMARKS
3	E55/CE/21869/2021	Kibet Denis Rotich	CP 29/6/2023	Working on proposal
4	E55/CE/22198/2022	Sophia Njoki Kamau	THESIS writing 25/3/2025	Thesis Writing
5	E55/CE/22411/2021	Stephen Muthiani Kisilu	Proposal GS	proposal GS
6	E55/CE/22573/2021	Caren Wangui Kamau	Proposal 13/9/2023	Working on proposal
7	E55/CE/24226/2012	Mercy M. Tsalwa	Proposal 9/01/2024	Working on proposal
8	E55/CE/24227/2012	Gereka Rowland Gitonga	Thesis Writing 4/9/2023	Thesis Writing
9	E55/CE/24877/2024	Jackson Wafula Simiyu	Concept paper 10/3/2026	Concept paper
10	E55/CE/25181/2014	Lily Cherotich Koske	Concept paper 26/1/2026	Concept paper
11	E55/CE/25435/2024	Maxwel Mungai Njoroge	Concept paper 10/3/2026	Concept paper
12	E55/CE/26262/2019	Peter Njoroge Kimani	CP 6/3/2023	Working on proposal
13	E55/CE/26304/2014	Stephen Biko Alphonse	Proposal 28/3/2023	Working on proposal
14	E55/CE/28184/2018	Kadenyi Mercy Osotsi	Thesis Bound 13/3/2026	To Graduate
15	E55/CE/28379/2018	Jack Muchiri Mwangi	Proposal with GS 22/10/2024	AT GS
16]	E55/CE/28691/2015	Kavoso Emmanuel Mumo	Thesis Bound	Graduated
17	E55/CE/28722/2013	Momanyi Bethuel Misati	Thesis 14/8/2024	Thesis Correction
18	E55/CE/34042/2017	Stanley Kimani Muiruri	Proposal 21/8/2023	Working on proposal
19	E55EA/20380/2022	Iyamurenje Regis	Thesis Bound	Graduated

PhD student under supervision (in progress)

S/NO.	REG. NO.	NAME	STATUS	REMARKS
1	E83/22423/2022	Muthangya Peter Mulwa	Thesis Writing 26/7/2023	Thesis Writing

Community Service and Other Engagements

- i. **2023-2026:** Appointment as **Chairman of the Board of Management-** Makhukhuni Secondary School, to a term of **THREE (3)** years with effect from 15th March 2023
- ii. **2023- 2026:** Appointment as **Member of the Board of Management,** Makhukhuni Secondary School, to a term of **THREE (3)** years with effect from 15th March 2023

Affiliation of Professional Bodies:

- i. **-2020:** Kenya Association of Educational Administration and Management (KAEAM) membership 2019/2020, to be renewed in October 2023.
- ii. **Administrative Positions Held:**
- iii. **-Friends Secondary School –Shirugu:**
- iv. **2016 – 2017:** Senior Graduate Teacher (TSC); **HOD** Science and Teacher of Biology and
- v. Chemistry
 - a. **Friends Secondary School –Matete:**
- vi. **2014 – 2015:** Senior Graduate Teacher (TSC); **HOD** Science/Technology/ICT and Teacher of Biology and Chemistry
- vii. **-BOM:** Member of Board of Management representing Teachers' interests
- viii. **-St. Mukasa Secondary School –Chimoi:**
- ix. **2011 – 2014:** Senior Graduate Teacher (TSC); Head of Department (**HOD**) (Science) (Biology, Chemistry and Physics) and Teacher of **Biology** and **Chemistry**.
- x. **Friends Secondary School –Maturu:**
- xi. **2007 –2010:** Graduate Teacher 1(TSC); Head of Department HOD (Science), Teacher of Biology and Chemistry.
- xii. **Friends Secondary School --Matete:**
- xiii. **2004:** Graduate Teacher 1 (TSC); Deputy Head Teacher (DHT) and Teacher of Biology and Chemistry

- xiv. **2003:** Graduate Teacher 1(TSC); and Teacher of Biology and Chemistry
- xv. **Nambale Boys Secondary School:**
- xvi. **2000 –2003:** Graduate Teacher1 (TSC); Teacher of Biology and Chemistry; Patron of
- xvii. Science Club/Scouting.
- xviii. **Namirama Girls’ Secondary School:**
- xix. **1999:** Graduate Teacher 1(TSC); Teacher of Biology and Chemistry, Science Club
Patron and House Teacher.
- xx. **Kivaywa Secondary School:**
- xxi. **1986 –1998:** Diploma Teacher (TSC); Teacher of Biology and Chemistry, Science Club
Patron and House Teacher and Teacher in charge of Academic Stores and Library.

Referee:

Dr. Miheso_O'Connor Marguerite

Senior Lecturer Mathematics Education

Chairman, Department of Educational

Communication and Technology

Mob. No.: +254720853900

C.C: 1. The Executive Dean: School of Education and Lifelong Learning

2. The Chairman: Department of Educational Communication and Technology