

CURRICULUM VITAE

PROF. MAWUADEM KOKU AMEDEKER, Ph. D. (CPhys. MInstP.)
Chartered Physicist/Science Educationist
Associate Professor of Science and Technology Education

Department of Physics Education
University of Education
P. O. Box 25
Winneba. Ghana. West Africa

E-mail: mkamedeker@uew.edu.gh; mawuden@yahoo.com

Mobile: +233 -0248-717066

1. Personal Information

Marital Status: Married with two children
Date of Birth: 1st March, 1954
Place of Birth: Mepe, Volta Region
Nationality: Ghanaian
Religion: Roman Catholic

2. Promotion

| | |
|---------------------|----------------------------------|
| Associate Professor | 18 th September, 2008 |
| Senior Lecturer | 3 rd June, 1999 |

3. Educational Institutions and Qualification

| University | Subject | Title | Grade/Year |
|---|--|--------|------------------------------|
| i. Edith Cowan University Perth, Western Australia (2008) | Science Educ. Science Education | Ph. D. | Pass |
| ii. The University of Manchester, U. K., | Theor. Physics | M. Sc. | Pass (1995) |
| iii. University of Cape Coast | Physics/Maths/Educ. B. Ed (Science) (B. Sc. (Hon.) Physics (1978)) | | 2 nd (Lower) 1977 |

4. Thesis Written

- i. The status and quality of continuous assessment in junior secondary science in Ghana. A Ph. D. thesis submitted to Edith Cowan University, Perth. Western Australia, (December, 2007).
- ii. OZI rule violation in backward vector meson production. M.Sc. Dissertation submitted to the University of Manchester, Manchester, U. K. (April, 1995)

5. Area of Specialisation

- i. **Ph. D. level**
Assessment in science; Teacher professional development and teacher formation; Integration of modern technologies into science instruction
- ii. **Masters Degree level**
Theoretical Particle Physics; Phi – meson coupling to the nucleon; Theoretical exploration of new particle creation
- iii. **Bachelor degree level**
Teaching of Physics and Mathematics at senior high school level: Pedagogies for instruction at the senior high school level

6. Career Objectives

- i. To become a distinguished science educator and an accomplished science educationist in Ghana and elsewhere
- ii. To provide a motivating leadership that would evidence the value of hard work for all that I interact with
- iii. To provide evidence of illuminating values of education for the entire human race so as to draw all individuals to accept to follow the path of education, whether formal or informal

7. Personal Quality

- i. Self-motivated to engage vigorously in self-development
- ii. Full of initiative, vigour and personal drive to achieve
- iii. A born leader – always ready to assume quality leadership position and make progress
- iv. A team-player with high sense of intelligence to discern between acceptable and non-acceptable norms
- v. Very analytical of all possibilities of life and actions and to readily motivate others
- vi. Good health, stamina-packed and full of achievement-oriented plans for my organisation

| 8. Awards Received | Awarded By | Year |
|--|--|-------------------------|
| i. International Postgraduate Research Scholarship for Ph. D. (Science Educ.) | Edith Cowan University (Perth- Australia) | April, 2005 - Dec. 2007 |
| ii. Research Visit to Institute of Theoretical Physics Beijing, - China. | Third World Academy of Science (ICTP- Italy) | Jul. – Sept. 2004 |
| iii. Research Visit to Institute of Theoretical Physics Beijing, - China. | Third World Academy of science (ICTP- Italy) | Sept. – Nov. 2002 |
| iv. Research grant for research on children’s science literacy | AFCLIST Durban, South Africa | 2002 - 2003 |
| v. Research grant for evaluation of the Science Resource Centres in Ghana | Univ. of Education Winneba, Ghana. | 2001 - 2003 |
| vi. Research Grant for evaluation of continuous assessment | Univ. of Education and World Bank. | 1997 - 1999 |
| vii. Scholarship Award for studies in Manchester, U.K. for M. Sc. (Theor. Physics) | Ghana Government | Sept.1992 - April, 1995 |

9. Employment History

| Institution | Position Held | Dates |
|---|--------------------------------|------------------------|
| University of Education | Contract Appt. | 2014 - 2024 |
| University of Education | Full-time Appt. | 2002 - 2014 |
| Kwame Nkrumah Univ. of Science and Technology, Kumasi | Sabbatical Leave | Oct. 2001 - Sept. 2002 |
| University of Education, Winneba | Full-time Appt. | 1992 - 2001 |
| Advanced Teacher Training College | Physics Tutor | Feb. 1983 - Oct. 1992 |
| Alamuwa Grammar School, Ado-Odo, Ogun State, Nigeria. | Physics Tutor | Oct. 1979 - Sept. 1982 |
| St. Peter’s Secondary School, Nkwatia-Kwahu, Ghana | National Service Physics Tutor | Sept.1978 - Sept. 1979 |

10. Ghana Education Services Grades Ranks

| | Dates |
|--------------------------------------|--------------|
| Promoted to Principal Superintendent | Sept. 1991 |
| Promoted to Senior Superintendent | Sept. 1984 |

11. Published articles in refereed journals

1. Apeadido, S. & Amedeker, M. K. (2023). Enhancing students' academic performance through advance organizers in a cooperative learning classroom at a senior high school in the Ashanti Region, Ghana. *East African Journal of Education and Social Science*, 4 (6), 48-57. DOI: <http://doi.org/10.46606/easjes2023v04i06.0666>
2. Amedeker, M. K. (2023). Assessment Pedagogical Content Knowledge (APCK): A model for implementing science classroom assessments. *Journal of Education and Practice*, 14 (6), 17 - 25
3. Amedeker, M. K. (2022). Simple pendulum experiment: Angular approximation revisited. *European Journal of Education and Pedagogy*, 3(3), 33-35
4. Amedeker, M. K. (2021). Cultural Renewal: A re-unification force for uniting with Diaspora Black Peoples World-wide. In G. J. S. Dei & R. Mohamed (Eds.). *Mapping the Contours: African Perspectives on Anti-Blackness and Anti-Black racism* (pp. 179-192). DIO Press
5. Amedeker, M. K. (2020). Teaching with frequent tests and its consequences on students' performance in physics. *Asian Journal of Social Science and Management Technology*, 2(4), 34 – 43. ISSN: 2313-7410. Available at www.ajssmt.com
6. Amedeker, M. K. (2020). Changing educational policies: Implications for ICT integration in science instruction and performance of students in Ghanaian senior high schools. In P. Kommers, A. B. N., Viana, T. Issa, & P. Isaias (Eds.). *Proceedings of the 7th International Conference on Educational Technologies 2020 (ICEduTech, 2020)* (pp. 72 – 78). Sao Paulo: IADIS Press. ISBN: 978-989-8533-2
7. Amedeker, M. K. (2018) – Caring relationships in the environment of changing teacher professional development. *African Journal of Educational Studies in Mathematics and Sciences*, 14, 185 – 198
8. Amedeker, M. K. (2016, December). The role of Online Public Access Catalogue in 21st Century education. *Quality Speaks*, (26), 5 - 6
9. Amedeker, M. K. (2016, March). Client experiences as a quality factor for improving staff development and training. *Quality Speaks*, (23), 3 - 6
10. Amedeker, M. K. (2015, December). Quality of assessment in the University of Education, Winneba. *Quality Speaks*, (22), 3 - 5
11. Amedeker, M. K. (2014). The contributions of continuous assessment to the improvement of students' learning of school science: A case of Ghana. In A. Asabere-Ameyaw, J. Anamuah-Mensah, G. S. Dei, & K. Raheem (Eds.), *Indigenist African Development and Related Issues: Towards a transdisciplinary perspective* (pp. 91 – 100). Rotterdam: Sense Publishers
12. Amedeker, M. K. (2014). Stuck in the neutral: Why technology hasn't made major inroads into education in Ghana. In D. McConatha, C. Penny, J. Schugar, & D. Bolton (Eds.). *Mobile Pedagogy and Perspectives on Teaching and Learning* (pp. 238 – 249). Hershey, PA: IGI Global

13. **Amedeker, M. K., & Tachie-Young, T.** (2012). Environmental hazard communication: Revisiting the indigenous methods to meet the challenges in Ghana. In A. Asabere-Ameyaw, G. J. S. Dei, & K. Raheem (Eds.), *Contemporary Issues in African Sciences and Science Education* (pp. 209 – 215). Rotterdam: Sense Publishers
14. **Hanson, R., Amedeker, M. K., Oppong, E., & Antwi, V.** (2011). Using microchemistry activities to improve pre-service teachers' conceptions of some chemistry topics. *International Journal of Educational Administration*, 3 (1), 19 – 40
15. **Amedeker, M. K.** (2010). Teacher professional development: Perspectives from Ghanaian junior secondary school science teachers. *Keffi Journal of Educational Studies*, 2 (1), 203 - 215
16. **Amedeker, M. K & Antwi, V.** (2007). Assessment practices used by physics teachers in senior secondary schools: Are our students informed? *International Journal of Education Studies*, 3 (1), 126 - 134
17. **Nandi, K. K., N. G. Migranov, Evans, J. C. and Amedeker, M. K.** (2006). Planetary and light motions from Newtonian theory: An amusing exercise. *Eur. J. Phys.*, 27 (2), 429 – 435
18. **Amedeker, M.K.** (2005). Reforming Ghanaian teacher education towards preparing an effective pre-service teacher. *Journal of Education and Teaching*, 31 (2), 99 – 110
19. **Amedeker, M. K., & Abdul-Rahman, L.** (2005). The nature of formal reasoning among Ghanaian basic school pupils in general logic tasks. *African Journal of Educational Studies in Mathematics and Sciences*, 3, 9 - 19
20. **Amedeker, M. K., Li, Q.F.** (2005). On the coupling of Φ Meson to Nucleons and Backward Φ Production. *Commun.Theor.Phys. (Beijing China)*, 43 (3), 493 – 496.
21. **Amedeker, M. K.** (2004). The Dual mode of light. *Everyday Science for Schools*, 3(1), 15 – 17
22. **Amedeker, M. K., Li, Q. F. and Zou, B. S.** (2003). Vector meson couplings to nucleons and backward ρ and ω production. *Commun.Theor.Phys. (Beijing China)*, 39 (6), 667 – 670.
23. **Amedeker, M. K. and Tamakloe, W. L.** (2003). Teaching and Assessing Affective skills in Science in Ghanaian Basic Schools. *Journal of the Ghana Science Association*, 5 (1), 163 – 173.
24. **Amedeker, M. K.** (2002). Science teacher trainees in a school attachment programme. *Journal of Education and Teaching* (U.K), 28 (1), 61-71.
25. **Aboagye, J. K., Atta-Boison, G. K. and Amedeker, M. K.** (2001). Is continuous assessment the panacea for pupil appraisal in junior secondary schools? *EDUCALERT – A periodic release of University College of Education of Winneba*, 2(1), 1 – 3
26. **Amedeker, M. K.** (2000). Alternative assessment as an ingredient of continuous assessment in junior secondary schools. *Journal of the Ghana Science Association*, 2 (1), 1-11.
27. **Amedeker, M. K.** (2000). Quarks: The fundamental particles. *Everyday Science for Schools*, 2 (1), 14 – 17.

28. **Benjamin, M. A. and Amedeker, M. K.** (2000). The effect of the absence of selected mineral elements on the growth of maize seedling. *NATT RESEARCH SERIES* –A journal publication of the Nigerian Association of Teachers of Technology, 4 (1 & 2), 1 – 7.
29. **Amedeker, M. K.** (2000). Popularising physics in our schools. *THE WEB (Winneba Educational Bulletin)*, 1 (8), 16 – 18.
30. **Amedeker, M. K. and Benjamin, M. A.** (1999). Ethnoscience: Africa's contribution to World Science. *Mate Masie* – Journal of the University College of Education, Winneba, 1, 143 – 155.
31. **Amedeker, M. K.** (1999). The changing attitudes towards girls' education in science in Ghana. *Ghana Journal of Education and Teaching (GHAJET)*, 1 (1), 141 – 151.
32. **Amedeker, M. K.** (1999). Teaching and learning science in a superstitious society. *THE WEB (Winneba Educational Bulletin)*, 1 (6), 23 – 28.
33. **Amedeker, M. K.** (1999). Ozone layer depletion: A problem for an entire planet. *THE WEB (Winneba Educational Bulletin)*, 1 (5), 12 – 14.
34. **Amedeker, M. K.** (1999). Lasers: A great leap in scientific and technological development. *THE WEB (Winneba Educational Bulletin)*, 1 (4), 21 – 24.
35. **Amedeker, M. K.** (1998). The place of native language in science teaching and learning in the junior secondary schools in Ghana. *Journal of the Ghana Science Association*, 1 (1), 7 – 11.
36. **Amedeker, M. K.** (1998). The search for fundamental particles. *Everyday Science for Schools*, 1 (2), 21 – 24.
37. **Benjamin, M. A. & Amedeker, M. K.** (1997). Teaching a model lesson to the child with hearing impairment in a regular junior secondary school classroom. *Ghanaian Journal of Special Education*, 1 (2), 34 – 38.

12. Publications in Book of Readings

1. **Amedeker, M. K.** (2012). Evaluating the implementation of online science course delivery: Experiences of first-time Moodle users at the University of Education, Winneba, Ghana. In P. Resta (Ed.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2012* (pp. 3971 – 3978). Chesapeake, VA: AACE
2. **Amedeker, M. K., Antwi, V., & Hanson, R.** (2011). Teaching with technology: Aiding science teacher-trainees' conceptual understanding through collaborative teaching and use of computer datalogger. In M. Kohler & P. Mistra (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2011* (pp. 3610 – 3617). Chesapeake, VA: AACE
3. **Amedeker, M. K., & Yidana, I.** (2010). Science teacher-trainees' perceptions about their Information and Communication Technology skills in the University of Education, Winneba, Ghana. In *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2010* (pp. 3235 – 3247). Chesapeake, VA: AACE
4. **Amedeker, M. K.** (1999). Coping with the problem of low vision in a regular science class: A case study at the University College of Education, Winneba. In

A. Onivehu (Ed.). *Pre-plan for Special Education service in Ghana in the 21ST Century*, (pp. 111 – 114). Winneba: Dept. of Special Education, UCEW.

13. Published Books

- 1 **Amedeker, M. K.** (2016). *The status and quality of continuous assessment in JHS in Ghana*. Saarbrucken: Scholars Press. ISBN: 978-3-659-84421-8
- 2 **Amedeker, M. K., Anderson, I. K., Taale, K. D., & Boateng-Ennimful, E.** (2011). *Physics 2: University physics made simple*. Winneba: Institute for Educational Development and Extension
- 3 **Amedeker, M. K., Anderson, I. K., Taale, K. D., & Antwi, V.** (2011). *Physics 1: University physics made simple*. Winneba: Institute for Educational Development and Extension
- 4 **Amedeker, M. K., & K. D. Taale** (2011). *Research Methods in Science Education*. Winneba: Institute for Educational Development and Extension
- 5 **Amedeker, M. K. et al.** (2002). *Manual for teaching Psychosocial Life Skills*. Accra: Ministry of Education (CRDD)
- 6 **Amedeker, M. K., Asabere-Ameyaw, A., Pratt, D., Darbah, F. V., & Taale, KD.** (1998). *Measurement and Analysis*. Winneba: Institute for Educational Development and Extension

14. Research in Progress

- i. Use of Multiple Representations as a pedagogy for teaching physics
- ii. A search for science teachers' assessment pedagogical content knowledge
- iii. Use of ICT to enhance teaching of science

15. Appointment as Examiner for Post-Graduate Thesis Examination

- 1 University of Education, Winneba as Internal Examiner for M. Ed. (Science Education), M. Phil. (Science Education), Ph. D. (Science Education) Examinations – 2008 – to date
- 2 University of Cape Coast, Cape Coast as External Examiner for M. Phil. (Science Education) Examinations and Ph. D. (Science Education) - 2009/2010 – to date

16. Postgraduate Theses (MPhil. & MEd.) Supervised

1. Name: Samuel Agyemang
Title: PROJECT-BASED LEARNING: THE EFFECT ON STUDENTS' ACADEMIC PERFORMANCE
Level: M. Phil. (Science Education)
Period: January 22, 2024 – On-going
2. Name: Victoria Dzikunu

- Title: USING DISCOVERY METHOD OF LEARNING TO IMPROVE THE ACADEMIC PERFORMANCE OF FORM TWO STUDENTS IN BIOLOGY
 Level: M. Ed. (Science Education)
 Period: September, 2023 – June, 2024 (Completed)
3. Name: Grace Amoah (Index No. 220034314)
 Title: THE EFFECT OF ICT INTEGRATION INTO INSTRUCTION ON STUDENTS' ACADEMIC PERFORMANCE
 Level: M. Ed. (Science)
 Period: Dec. 2022 – On-going
 4. Name: Mohammed, Iddrisu
 Title: PERCEIVED CAUSES AFFECTING ACADEMIC PERFORMANCE OF SENIOR HIGH SCHOOL STUDENTS IN HALF ASSINI SENIOR HIGH SCHOOL
 Level: M. Phil. (Science Education)
 Period: November 05, 2021 – Sept. 2023 (Completed)
 5. Name: Samuel Aidoo
 Title: TEACHING SOME SELECTED TOPICS IN PHYSICS USING CONCEPTUAL CHANGE APPROACH: A CASE STUDY OF WINNEBA SENIOR HIGH SCHOOL
 Level: M. Phil. (Science Education)
 Period: November 05, 2021 – Sept. 2023 (Completed)
 6. Name: Apeadido, Shine
 Title: USING ADVANCE ORGANISERS IN COOPERATIVE LEARNING CLASSROOM TO TEACH MEASUREMENT
 Level: M. Phil. (Science Education)
 Period: November 05, 2021 – August 2022 (Completed)
 7. Name: Afriyie, Saraphina Acheampong
 Title: Remediating students' misconceptions on some selected topics in Integrated Science through conceptual change text
 Level: M. Phil. (Science Education)
 Period: November 05, 2021 – May, 2023 (Completed)
 8. Name: Albert Nuamah
 Title: THE EFFECTS OF PROBLEM SOLVING SKILLS-BASED TEACHING APPROACH ON SCIENCE STUDENTS' PERFORMANCE
 Level: M. Phil. (Science Education)
 Period: July 15, 2021 – on-going
 9. Name: Jubam Jilimah Binyam
 Title: THE EFFECTS OF ICT ON THE PERFORMANCE OF SHS 2 BIOLOGY STUDENTS IN SABOBA DISTRICT
 Level: M. Phil. (Science Education)
 Period: July 15, 2021 – on-going
 10. Name: Isaac Amoah
 Title: INVESTIGATING STUDENTS' MEASURING SKILLS IN THE LABORATORY
 Level: M. Phil. (Science Education)
 Period: July 15, 2021 – On-going

11. Name: Michael Anto
 Title: ASSESSMENT OF GHANAIAIAN HIGH SCHOOL STUDENTS' SCIENCE PRACTICAL PROCESS SKILLS
 Level: M. Phil. (Science Education)
 Period: Jan. 2021 – August, 2023 (Completed)
12. Name: Yaw Adjei Poku
 Title: USING ACTIVITY-BASED METHOD IN TEACHING AND LEARNING SOME SELECTED TOPICS IN ELECTRICITY AND MECHANICS
 Level: M. Phil. (Science Education)
 Period: July 15, 2021 – August, 2022 (Completed)
13. Name: Florence Tsevi
 Title: MAKING CHEMISTRY TEACHING AND LEARNING MORE PRACTICAL THROUGH APPROPRIATE INTERACTIVE INSTRUCTIONAL RESOURCES: A CASE OF OLA SENIOR HIGH SCHOOL
 Level: M. Phil. (Science Education)
 Period: July 15, 2021 - Ongoing
14. Name: AWUKEY, Raphael Awelama
 Title: USING GUIDED INQUIRY METHOD TO INVESTIGATE STUDENTS' PERFORMANCE IN PHYSICS IN NAFANA SENIOR HIGH SCHOOL
 Level: M. Ed. (Science Education)
 Period: March 2021 – December 02, 2022 (Completed)
15. Name: ABIBU, Latifu
 Title: THE EFFECT OF COMPUTER ASSISTED INSTRUCTION ON STUDENTS' ACADEMIC PEFORMANCE
 Level: M. Phil (Science Education)
 Period: March, 2021 – February 2022 (Completed)
16. Name: ADUO, Frank
 Title: INVESTIGATING THE IMPACT OF MULTIPLE REPRESENTATION IN THE IN TEACHING SELECTED PHYSICS TOPICS
 Level: M. Phil. (Science Education)
 Period: March 2021 – December, 2021(Completed)
17. Name: KABU, Ruth
 Title: IDENTIFYING AND REMEDIATING STUDENTS' CHALLENGES IN SOLVING MECHANICS PROBLEMS IN PHYSICS
 IDENTIFYING AND REMEDIATING STUDENTS' CHALLENGES IN SOLVING MECHANICS PROBLEMS IN PHYSICS
 Level: M. Phil. (Science Education)
 Period: March 2021 – July, 2023 (Completed)
18. Name: KAMPO, Peace
 Title: INTEGRATING ICT IN TEACHING AND LEARNING BIOLOGY TO IMPROVE THE ACADEMIC PERFORMANCE OF STUDENTS
 Level: M.Phil. (Science Education)
 Period: March 2021 – Jan 2022 (Completed)

19. Name: KOOMSON, Benjamin Daatse
 Title: AN INVESTIGATION OF THE KNOWLEDGE, BELIEFS AND PRACTICES OF SENIOR HIGH SCHOOL INTEGRATED SCIENCE TEACHERS IN MFANTSEMAN MUNICIPALITY
 Level: M. Ed. (Science Education)
 Period: October 2020 – July 26, 2021 (Completed)
20. Name: DAH, Maxwell
 Title: PHYSICS TEACHERS' CLASSROOM PRACTICES AND THEIR STUDENTS' PERCEPTIONS
 Level: MPhil. (Science Education)
 Period: Dec. 2019 – May 2021 (Completed)
21. Name: FEVLO, Ernest Samuel
 Title: THE CIENCE RESOURCE CENTRES: THE STATE AND QUALITY IN SCHOOLS IN THE VOLTA REGION
 Level: MPhil. (Science Education)
 Period: Dec., 2019 – October, 2021 (Completed)
22. Name: NYASEPE, Irene
 Title: INVESTIGATING BIOLOGY TEACHERS' ASSESSMENT PRACTICES IN ELATION TO PROFILE DIMENSIONS IN GA SOUTH MUNICIPAL
 Level: M. Ed (Science)
 Period: August, 2019 – January, 2020 (Completed)
23. Name: ALI, Alhassa Karim
 Title: SCIENCE TEACHER TRAINEES' PEDAGOGICAL CONTENT KNOWLEDGE AND ITS INFLUENCE ON THEIR SCIENCE TEACHING AT BAGABAGA COLLEGE OF EDUCATION
 Level: M.Ed.(Science)
 Period: 2017 – April, 2018 (Completed)
24. Name: Zottor, James
 Title: USING THE PREFERRED LEARNING STYLES OF STUDENTS TO IMPROVE THEIR ACADEMIC PERFORMANCE IN BIOLOGY: A CASE STUDY AT PECULIAR INTERNATIONAL SCHOOL. KASOA
 Level: M. Ed (Science)
 Period: August 2017 – March 27, 2018 (Completed)
25. Name: APPIAH, Eugene Amoah
 Title: INVESTIGATING THE PEDAGOGICAL CONTENT KNOWLEDGE OF AN INTEGRATED SCIENCE TEACHER: A CASES TUDY
 Level: M. Ed. (Science)
 Period: August 2016 – May, 2017 (Completed)
26. Name: AMEYAW, Frederick
 Title: THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGY TOOLS TO TEACH CHEMISTRY: A STUDY OF A SCIENCE CLASS
 Level: M. Phil. (Science Education)
 Period: 2016 September – (Completed October, 2017)
27. Name: AMOAKO, Peter

- Title: THE IMPACT OF CONCEPT MAPPING IN REDUCING COGNITIVE LOAD OF STUDENTS
 Level: M. Ed
 Period: August 2016 – January, 2017(Completed)
28. APPIAH-TWUMASI, Eric
 Title: COMPARATIVE EFFECT OF COOPERATIVE LEARNING AND COOPERATIVE LEARNING WITH INSTRUCTIONAL MANUAL ON STUDENTS' PERFORMANCE IN MECHANICS CONCEPTS
 Level: M. Phil.
 Period: 2016 – Oct, 2016 (Completed)
29. Name: MENSAH, Sampson Akrosumah
 Title: STUDENTS' MENTAL MODELS OF CHEMICAL REACTIONS AND BALANCING OF CHEMICAL EQUATIONS: A CASE STUDY OF A GHANAIAAN SENIOR HIGH SCHOOL
 Level: M. Phil.
 Period: 2015/2016 – February, 2017 (Completed)
30. Name: MENSAH, Luke Edoh
 Title: THE ROLE OF PRACTICAL WORK IN TEACHING PHYSICS AT THE SENIOR HIGH SCHOOL LEVEL: A CASE STUDY IN THE CENTRAL REGION OF GHANA
 Level: M. Ed.
 Period: August, 2016 – January, 2017 (Completed)
31. Name: AMEGBEDZI, Charles
 Title: USING GRAPHIC ORGANISERS TO AID STUDENTS' UNDERSTANDING IN INTEGRATED SCIENCE: A CASE STUDY AT DZODZE PENYI SENIOR HIGH SCHOOL
 Level: M. Ed.
 Period: 2015 – December, 2015 (Completed)
32. Name: SAPEY, Mathias Godson
 Title: FORMATIVE ASSESSMENT AS TOOL FOR IMPROVING STUDENTS' SCIENCE SKILLS ACQUISITION: A STUDY OF BIOLOGY STUDENTS' IN AGOTIME SENIOR HIGH SCHOOL
 Level: M. Ed.
 Period: 2015 – (Abandoned with excuse of no funding)
33. Name: BALAGUMYTIME, Abel
 Title: USE OF SCIENCE PROCESS SKILLS TO FACILITATE STUDENTS' LEARNING OF PHYSICS: A CASE STUDY IN THE UPPER EAST REGION OF GHANA
 Level: M. Ed.
 Period: 2015 – Jan. 2016 (Completed)
34. Name: KRAH, Peter Kwesi
 Title: GUIDED DISCOVERY AND SELF-LEARNING STRATEGIES: BIOLOGY INTERVENTION LESSONS IN A GHANAIAAN SENIOR HIGH SCHOOL
 Level: M. Phil.
 Period: 2014/2015 – October, 2015 (Completed)

35. Name: Christopher Dzorkpata
 Title: THE ROLE OF CUES IN IMPROVING STUDENTS' LEARNING OF PHYSICS: A CASE STUDY OF FORM ONE STUDENTS OF ST PETER'S SENIOR HIGH SCHOOL
 Level: M. Ed. (Pedagogy)
 Period: 2014 – March, 2015 (Completed)
36. Name: Eric Sunfra
 Title: THE EFFECT OF CLASS-WIDE PEER TUTORING IN IMPROVING STUDENTS' SCIENCE CONCEPT DEVELOPMENT: A CASE OF SENIOR HIGH SCHOOL
 Level: M. Ed. (Science)
 Period: 2014 – March 2015 (Completed)
37. Name: Ma-Moun Awal
 Title: ASSESSING THE UNDERSTANDING OF STUDENTS IN ELCTRONICS AT THE SENIOR HIGH SCHOOL LEVEL: A CASE STUDY OF A SENIOR HIGH SCHOOL IN AGONA NYAKROM
 Level: M. Ed. (Pedagogy)
 Period: 2012 – 2015 (Completed)
38. Name: Alphonso Saah Taylor
 Title: THE IMPACT OF STUDENT TEAM ACHIEVEMENT DIVISION (STAD) TECHNIQUES ON STUDENTS' LEARNING OUTCOMES IN SOME SELECTED TOPICS IN CHEMISTRY: A STUDY AT DATUS INTERNATIONAL SENIOR HIGH SCHOOL
 Level: M. Phil.
 Period: 2013/2014 – October, 2014 (Completed)
39. Name: Rachel Koranteng
 Title: LEARNING WITH MULTIPLE REPRESENTATIONS: EFFECT ON THE PERFORMANCE OF STUDENTS IN THE STUDY OF SOME TOPICS IN PHYSICS
 Level: Master of Philosophy (Science Education)
 Period: 2011/2012 – 2012 (Completed)
40. Name: John Sam
 Title: ASSESSING THE PERFORMANCE OF STUDENTS IN THE EFUTU MUNICIPLITY IN SCIENCE AT THE BECE FOR THE PAST FIVE YEARS
 Level: M. Ed. (Science)
 Period: 2010 – June, 2012 (Completed)
41. Name: Frank Osei Karikari
 Title: THE CURRENT CONDITION OF SCIENCE TEACHING AND LEARNING AT THE SENIOR HIGH SCHOOL LEVEL: A CASE STUDY OF SELECTED SCHOOLS IN ASANTE AKIM SOUTH DISTRICT
 Level: M. Ed. (Science)
 Period: 2010 – (Abandoned Programme)
42. Name of Student: Nathan Ohene Gyan
 Title: PRE-SERVICE BASIC TEACHERS' SCIENCE KNOWLEDGE LEVEL, ATTITUDE TOWARDS AND EFFICACY BELIEFS OF SCIENCE TEACHING

- Level: Master of Philosophy (Science Education)
 Period: 2010/2011 – 2012 (Completed)
43. Name of student: Charles Badu
 Title: ENHANCING THE PERFORMANCE OF SENIOR HIGH SCHOOL STUDENTS IN ASPECTS OF GENETICS USING SELF-LEARNING AND COOPERATIVE INSTRUCTIONAL STRATEGIES
 LEVEL; Master of Philosophy (Science Education)
 Period: 2009/2010 – 2011 (Completed)
44. Name of student: Rosemary Azonu
 Title: USING CONTINUOUS ASSESSMENT TO ENHANCE THE TEACHING AND LEARNING OF SCIENCE AT THE JUNIOR HIGH SCHOOL LEVEL
 Level: Master of Philosophy (Science Education)
 Period: 2008/2009 – September, 2009 (Completed)
45. Name of student: Nelson Odum
 Title: THE STATUS AND QUALITY OF CONTINUOUS ASSESSMENT IN JUNIOR HIGH SCHOOL SCIENCE
 Level: Master of Philosophy (Science Education)
 Period: 2008/2009 – October 2009 (Completed)
46. Name of student: Amevor Asiwome, K.
 Title: SCHOOL-BASED ASSESSMENT IN COLLEGES OF EDUCATION IN GHANA: IMPLICATIONS FOR STUDENTS' PERFORMANCE IN SCIENCE
 Level: Master of Philosophy (Science Education)
 Period: 2008/2009 – October, 2009 (Completed)
47. Name of student: Emmanuel Owusu
 Title: FACTORS AFFECTING TEACHERS' PARTICIPATION IN PROFESSIONAL LEARNING ACTIVITIES
 Level: M. Ed. (Science)
 Period: 2008 – June, 2011 (Completed)
48. Name of student: Mark Kwesi Eshun
 Title: AN INVESTIGATION OF THE DIFFICULTIES EXPERIENCED BY STUDENTS IN SENIOR HIGH SCHOOL CHEMISTRY PRACTICAL
 Level: M. Ed. (Science)
 Period: 2008 – October, 2009 (Completed)
49. Name of student: Geoffrey Yao Klutse
 Title: A NOVEL APPROACH TO TEACHING AND LEARNING OF INTEGRATED SCIENCE IN JUNIOR HIGH SCHOOLS
 Level: Master of Philosophy (Science Education)
 Period: 2008/2009 – October, 2010 (Completed)
50. Name of student: Louise Tsotso Kondoh
 Title: STUDENTS' RESPONSE TO CONCEPTUAL QUESTIONS: A STUDY OF SOME CONCEPTS IN CHEMISTRY
 Level; Master of Philosophy (Science Education)
 Period: 2008/2009 – October, 2010 (Completed)
51. Name of student: Godwin, Tordzro

- Title: A COMPARATIVE STUDY OF BIOLOGY PRACTICAL LESSONS IN SOME SELECTED WELL-ENDOWED AND LESS-ENDOWED SENIOR HIGH SCHOOLS IN GHANA
 Level: Master of Philosophy (Science Education)
 Period: 2008/2009 – October, 2010 (Completed)
52. Name of Student: Vivian Uchechukwu Ajukwu
 Title: GHANAIAN SENIOR HIGH SCHOOL INTEGRATED SCIENCE STUDENTS' PERCEPTION OF ENERGY
 Level: Master of Philosophy (Science Education)
 Period: 2008/2009 – October, 2011 (Completed)
53. Name of student: Charles Essiam
 Title: EFFECTS OF REGULAR CLASSROOM TESTS ON LEARNING AND UNDERSTANDING OF CONCEPTS IN CHEMISTRY
 Level: Master of Philosophy (Science Education)
 Period: 2008/2009 – October, 2010 (Completed)
54. Name of student: Frederick Sekyere Akosah
 Title: THE USE OF PROBLEM-BASED LEARNING APPROACH IN BALANCING REDOX EQUATIONS IN SENIOR HIGH SCHOOLS
 Level: Master of Philosophy (Science Education)
 Period: 2008/2009 – November, 2010 (Completed)

17. Ph. D. Thesis Supervision

1. Name: ALI Karim Alhassan
 Title: USING VIRTUAL PHYSICS LABORATORY TO DEVELOP SCIENCE STUDENT TEACHERS' PCK IN THERMAL ENERGY
 Awarding Institution: University of Education, Winneba
 Level: Ph.D. (Science Education)
 Period: April, 2024- On-going
2. Name: ADANU-JEBUNI, Cynthia
 Title: PHOTONIC KITS IN PHYSICS TEACHING
 Awarding Institution: University of Education, Winneba
 Level: Ph. D. (Science Education)
 Period: March, 2023 – On-going
3. Name: DORSAH, Philip
 Title: EXPLORING PRE-SERVICE TEACHERS' EPISTEMOLOGICAL BELIEFS AND VIEWS ON NATURE OF SCIENCE
 Awarding Institution: University of Education, Winneba
 Level: PhD (Science Education)
 Period: May 2020 – August 30, 2023 (Completed)
4. Name: ESSIAM, Charles
 Title: EXPERIENCES OF PRE-SERVICE TEACHERS ON UEW PROGRAMME: THE QUALITY PRACTICE
 Awarding Institution: University of Education, Winneba
 Level: PhD Science Education
 Period: May 2022 – April, 2024 (Completed)

5. Name: BOISON, Raymond Bentum
 Title: AN EXAMINATION OF THE ROLE OF COVID-19 PANDEMIC ON EDUCATIONAL DELIVERY: ONLINE LEARNING DELIVERY OF SCIENCE EDUCATION
 Awarding Institution: University of Education, Winneba
 Level: PhD Science Education
 Period: May 2022 – On-going
6. Name: KLUTSE, Geoffrey Yao
 Title: QUALITY AND STATUS OF PEDAGOGICAL CONTENT KNOWLEDGE: A CASE STUDY OF FOUR WELL-PERFORMING PHYSICS TEACHERS IN THE VOLTA REGION
 Awarding Institution: University of Education, Winneba
 Level: PhD. (Science Education)
 Period: October, 2020 – Oct. 2023 (Completed)
7. Name: AMEVOR, Asiwome Kwadwo
 Title: TEACHER DEVELOPMENT IN GHANA: EXPLORING REFLECTIVE TEACHING AND PORTFOLIO DEVELOPMENT AMONG PRE-SERVICE TEACHERS
 Awarding Institution: University of Education, Winneba
 Level: Ph.D. (Science Education)
 Period: October, 2020 – Oct. 2023 (completed)
8. Name: HANSON, Ruby
 Title: USE OF MICRO-CHEMISTRY EQUIPMENT TO ENHANCE STUDENTS' UNDERSTANDING OF CONCEPTS IN CHEMISTRY
 Awarding Institution: University of Education, Winneba, GHANA
 Level: Ph. D. (Science Education)
 Period: September, 2010 – Dec., 2014 (Completed)
9. Name of Student: ATTAFUAH, Peter
 Title: USING FAST FEEDBACK METHODS TO HELP STUDENTS' CONCEPTUAL UNDERSTANDING OF SOME SELECTED TOPICS IN CHEMISTRY AT THE SENIOR HIGH SCHOOL LEVEL
 Awarding Institution: University of Education, Winneba, GHANA
 Level: Ph. D. (Science Education)
 Period: September, 2010 – April 2015 (Completed)

18. Theses/Dissertation Examined

- 1 Name: Eric Appiah-Twumasi
 Title: RELATIONSHIPS AMONG STUDENTS' ATTITUDES, SELF-EFFICACY, PERSONALITY TRAITS AND ACADEMIC PERFORMANCE IN SENIOR HIGH PHYSICS
 Level: Ph.D. (Science Education)
 Awarding Institution: University of Education, Winneba
 Year of Examination: June, 2022
- 2 Name: Anthony Dadzie

- Title: STATE OF BIOLOGY TEACHING IN PUBLIC SENIOR HIGH SCHOOLS IN THE CAPE COAST METROPOLIS
 Level: Ph.D. (Science Education)
 Awarding Institution: University of Cape Coast
 Year of Examination: June, 2022
- 3 Name: Messiah Morgan Abeku
 Title: THE INFLUENCE OF TEACHERS' CLASSROOM MANAGEMENT PRACTICES ON SHS STUDENTS' INTEREST IN PHYSICS
 Level: M.Phil. (Science Education)
 Awarding Institution: University of Cape Coast
 Year of Examination: May, 2022
- 4 Name: Charles Amoah Agyei:
 Title: EFFECT OF CONTEXT-BASED TEACHING ON STUDENTS' PERFORMANCE IN GENETICS
 Level: Ph.D (Science Education)
 Awarding Institution: University of Cape Coast
 Year of Examination: February, 2022
- 5 Name: Michael Yaw Osei
 Title: ASSESSING THE SELF-REGULATORY SKILLS OF SENIOR HIGH SCHOOL STUDENTS IN THE CAPE COAST METROPOLIS
 Level: M.Phil. (Science Education)
 Awarding Institution: University of Cape Coast
 Year of Examination: November, 2021
- 6 Name: Edward Fayah
 Title: CHEMISTRY TEACHERS' FEEDBACK PRACTICES AND HOW STUDENTS PERCEIVE AND USE THEM
 Level: PhD (Science Education)
 Awarding Institution: University of Cape Coast
 Year of Examination: March, 2021
- 7 Name: Abigail Fiona Dzidzinyo
 Title: EXPLORATION OF SENIOR HIGH SCHOOL BIOLOGY STUDENTS' ALTERNATIVE CONCEPTIONS IN GENETICS
 Level: Ph.D. (Science Education)
 Awarding Institution: University of Cape Coast
 Year of Examination: January, 2021
- 8 Name: Ebenezer Appah Bonney
 Title: THE STATUS OF SCIENCE TEACHING AND LEARNING AT THE COLLEGES OF EDUCATION IN THE CENTRAL AND WESTERN REGIONS OF GHANA
 Level: Ph.D. (Science Education)
 Awarding Institution: University of Cape Coast
 Year of Examination: August, 2019
- 9 Name: Charles Deodat Otami
 Title: TEACHING AND CLASSROOM PRACTICES OF INTEGRATED SCIENCE TEACHERS IN JUNIOR HIGH SCHOOLS
 Level: Ph.D. (Science Education)

- Awarding Institution: University of Cape Coast
Year of Examination: June, 2019
- 10 Name: Ebenezer Dossah
Title: CHEMISTRY TEACHERS' USE OF LESSON TIME IN SENIOR HIGH SCHOOLS
Level: M. Phil (Science Education)
Awarding Institution: University of Cape Coast
Year of Examination: December, 2018
- 11 Name: Eugene Adjei Johnson
Title: ASSESSMENT OF GHANAIAN SENIOR HIGH SCHOOL STUDENTS' SCIENCE PROCESS SKILLS IN OPTICS
Level: Ph.D. (Science Education)
Awarding Institution: University of Cape Coast, Cape Coast, GHANA
Year of Examination: February, 2018
- 12 Name: Godwin Kwame Aboagye
Title: EFFECTS OF COMBINING INQUIRY-BASED REAL HANDS-ON AND COMPUTER SIMULATION METHODS WITH COOPERATIVE LEARNING ON STUDENTS' LEARNING OUTCOMES IN ELECTRIC CIRCUITS
Level: Ph. D. (Science Education)
Awarding Institution: University of Cape Coast, Cape Coast, GHANA
Year of Examination: March 2016
- 13 Name: Henry Benyah
Title: EFFECTS OF LEARNING CYCLE APPROACH ON STUDENTS' UNDERSTANDING OF SELECTED CONCEPTS IN GEOMETRICAL OPTICS
Level: Ph. D. (Science Education)
Awarding Institution: University of Cape Coast, Cape Coast, GHANA
Year of Examination: March 2016
- 14 Name of Student: J. Y. Appiah
Title: EVALUATION OF THE UNIVERSITY OF CAPE COAST REMEDIAL SCIENCE PROGRAMME
Level: Ph. D. (Science Education)
Awarding Institution: University of Cape Coast, Cape Coast, GHANA
Year of Examination: May 2013

19. Conferences/Seminars/Workshops

1. Faculty of Science Education Training and Development Seminar – May 09 – 10 May, 2024. Paper presented: Differences between Job and Career
2. Ghana Science Association UEW Seminar – April 05, 2024. Paper presented: Emerging opportunities to tap for early careers: The Role of GSA
3. Faculty of Science Education, UEW – Workshop on Innovative teaching strategies – July 12, 2023. Paper presented: Use of technology to manage daily activities in school
4. SAGE Webinar on 'How to secure funding', June 21, 2023. Webinar ID: 943 8986 7234

5. SAGE Webinar: Analysing Published Literature Across Paradigms and Discipline. April 18, 2023. Webinar ID: 987 5020 2210
6. Workshop on Global Best Practices in Teaching STEM –Resource Person, 10-14, October, 2022 at UEW- North Campus Winneba
7. African Union Development Agency (AUDA-NEPAD) Webinar. Empowering young African innovation leaders for Africa’s socioeconomic development. The Calestous Juma Executive Dialogue Webinar Series – July 28, 2022
8. IOP Webinar on Empowering through Coaching – July 13, 2022
9. SAGE Webinar. Preparing your manuscript, using SAGE Research Methods. May 11, 2022. Webinar ID: 1791151958
10. African Union Development Agency-NEPAD (AUDA-NEPAD) Webinar. Rethinking and reimagining education in Post Covid Africa – February 24, 2022 Webinar ID: 95412088619; Passcode: 913967
11. IOP Webinar on Innovation in Research – December 01, 2021
12. Paper presented: Proposal Writing to Attract Funding. Faculty of Science Education Retreat Workshop held at Elmina Beach Resort, Elmina, August 26 – 29, 2021
13. Thesis Writing Workshop for Graduate Students – Faculty of Science Graduate Workshop, UEW on 05 -07 May 2021. Paper presented: Writing the Literature Review
14. Paper presented: Use of Software to analyse quantitative data organised. Workshop by UEW – 15-18 March, 2021
15. Paper presented: Physics principles working in tandem with the musical arts. International Conference on Arts and Science. Virtual Conference organised by UEW, Winneba, Jan. 26 – 28, 2021
16. T-TEL Workshop on teacher education for teacher trainers held at UCC on 24th January, 2021
17. Paper presented: Changing educational policies: Implications for ICT integration in science instruction and performance of students in Ghanaian senior high schools. The 7th International Conference on Educational Technologies, 2020 (ICEduTech, 2020) in Sao Paulo, Brazil, Feb 05 – 07, 2020
18. Caring relationships: Mentor-mentee discourses during internships. Faculty of Science Education Seminar, February 20, 2019
19. Guidelines for thesis writing at Workshop for Graduate Students of UEW on May 02, 2018
20. Academic Excellence: The role of dedicated Staff. Presented at Workshop for newly recruited German lecturers and a Fulbright Fellow on October 19, 2017 at the Finance Conference Room, UEW
21. Academic Excellence in Higher Education: Your stake. Presented at Workshop for newly employed academic staff of University of Education on January 25, 2017 at the Registrar’s Conference Room, North Campus
22. Quality Assurance: Role of Staff of Radio Windy Bay. Presented at Conference Room of Radio Windy Bay on January 10, 2017
23. Quality Assurance: The role of UEW students. Presented at orientation Workshop for fresh students for the 2016/2017 Academic year at the Anamuah-Mensah

- Conference Centre on August 26, 2016 for Winneba students and August 31, 2016 for Ajumako students
24. The role of UEW Security Services in ensuring academic excellence for the University of Education, Winneba. Presented at Workshop for UEW Security Staff, June 01, 2016 at Pecku Conference Room, North Campus.
 25. Quality Assurance in Human Resource mobilisation for UEW. Presented at Workshop for staff of the Division of Human Resource, UEW, Winneba, May 16, 2016 at HR Division
 26. Quality Assurance: Minimum requirements for admission into tertiary institutions in Ghana. Presented at Workshop for Heads of Department, Deans and Directors of University of Education, Winneba, Sept. 27 – 28, 2015 at SMAYAK Hotel, Apam
 27. Quality Assurance for academic excellence in UEW. Presented at Workshop for staff, Communication and media Studies Department, UEW, September 01, 2015
 28. Quality Assurance in the operations of the University Health Services. Presented at Workshop for UEW University Clinic, July 23, 2015
 29. Quality Assurance for Academic Excellence. Presented at Workshop for Ghanaian Languages Campus, Ajumako, July 08, 2015
 30. Quality Assurance in the operations of the University Library. Presented at Workshop for Library Staff of the University of Education, Winneba, June 04, 2015
 31. Quality Assurance Workshop for the Faculty of Science Education staff of the University of Education, Winneba, Presented at Science Education Faculty Seminar, April 15, 2015
 32. Quality assurance Workshop for the Department of Business Education staff of the University of Education, Winneba, April 10, 2015
 33. Creating a culture of ownership of my workplace. Quality Assurance Workshop delivered at the University of Education, Winneba, January 30, 2015 to February 11, 2015 for Academic Staff
 34. Quality Assurance of the operations of the University of Education, Winneba, delivered at the training session of Deans, Heads of Department and Sections at SMAYAK Hotel, Apam, September 17, 2014
 35. Ensuring quality in Distance Education delivery, for IEDE staff their Annual Review Retreat, August 29, 2014 at Wadoma Royale Hotel, Kumasi
 36. Establishing vibrant Quality Assurance Units in the University of Education, Winneba, January 23, 2014 at Mampong and Kumasi campuses of UEW; February 05, 2014 at Ajumako campus of UEW
 37. The Blackboard is indispensable in teaching and learning of physics: What is your bet? Faculty of Science Education Seminar, UEW, October 30, 2013
 38. ICT integration into teaching: Whither is Ghana drifting? Faculty of Science Education Seminar, UEW, February 13, 2013
 39. Evaluating the implementation of online science course delivery: Experiences of first-time Moodle users at the University of Education, Winneba – 23rd Society for Information Technology & Teacher Education Conference – Austin, Texas, USA, March 05 – 09, 2012

40. Evaluating the implementation of online science course delivery: Experiences of first time Moodle users at UEW. Faculty Seminar, UEW, February 08, 2012
41. Teaching with technology: Aiding science teacher trainees' conceptual understanding through collaborative teaching and use of computer datalogger – 22nd Society for Information Technology & Teacher Education Conference – Nashville, Tennessee, USA, March 07 – 11, 2011
42. Teaching with computers in under-resourced environment. Faculty Seminar, UEW, February 09, 2011
43. Science teacher trainees' perceptions about Information and Communication Technology skills in the University of Education, Winneba, Ghana – ED-MEDIA 2010 World Conference on Educational Multimedia, Hypermedia & Telecommunications, Toronto, Canada, June 28 – July 02, 2010
44. Are UEW science teacher trainees prepared to meet the exigencies of the changes in the policies of course registration, checking examination results and assessments submissions? Faculty Seminar, UEW, Feb. 17, 2010
45. Can continuous assessment help to improve students' academic performance in junior high school integrated science? Held at Honolulu, 7th Hawaii Conference on Education, January 04 – 07, 2009
46. Basic electronics for Integrated Science Panel – presented at 50th National Workshop/Conference of Ghana Association of Science Teachers at Ho, September 01 - 06, 2008
47. Confronting the new challenges of education reform in Ghana: Using continuous assessment to improve students' learning of junior high school science, The 26th Annual Conference of the Association for Educational Assessment in Africa (AEAA) at La Palm Royal Beach Hotel, Accra – August 17 – 22, 2008
48. Teacher professional development: Perspectives from Ghanaian junior secondary science teachers implementing continuous assessment - International Conference on Education, Economy and Society, Paris, France – July 16 – 19, 2008
49. Poster presentation: The status and quality of continuous assessment in junior secondary science in Ghana – Conference of the Western Australian Science Educators Association, Edith Cowan University, Perth, - November 30, 2006.
50. Prospects for implementing assessment for learning in Ghanaian junior secondary science – Faculty of Science Education Seminar, University of Education, Winneba. Ghana. - 24th February, 2006
51. Backward photo-production of ϕ mesons in Kp interactions – Institute of Theoretical Physics Seminar, Beijing - September, 2004
52. On the coupling of ϕ meson to nucleons and backward ϕ production – Mentouri University, Constantine, Algeria 3 – 08 April, 2004
53. The Ghanaian primary School Pupils' Concept of Energy. West African Examinations Council Monthly Seminars, Accra. - 30th May, 2003.
54. Deriving the differential cross-section formula using simple tree diagram, Institute of Theoretical Physics, Beijing, China. - Oct. 2002.
55. Teaching and assessing affective skills in science in Ghanaian Basic Schools. West African Examinations Council Monthly Seminars, Accra - 23rd February, 2001.

56. The Use of Computer-Aided Strategies for teaching physics in the Pre-tertiary institutions- presented at the 44th Annual National Conference of the Ghana Association of Science Teachers at Tamale - September, 2000.
57. Towards a theoretical framework for improving assessment in science in the junior secondary schools in Ghana. West African Examinations Council Monthly Seminars, Accra - 1st October, 1999.
58. Promoting Quality Science Teaching and Learning through alternative assessment: The case of the continuous assessment in junior secondary schools – presented at the 21st Biennial Conference of the Ghana Science Association – University of Ghana, Legon 8th – 13th August, 1999.
59. Coping with the problem of low vision in a regular science class: A case study at University College of Education, Winneba – presented at 1st National Conference on Special Education at Winneba – August 1998.
60. The Place of Native Language in science teaching and learning in the Junior Secondary Schools in Ghana – presented at the 20th Biennial Conference of the Ghana Science Association at the Kwame Nkrumah University of Science and Technology, Kumasi - August, 1997.
61. The role of physics in a developing industrial world presented at the 36th Annual National Conference of the Ghana Association of Science Teachers conference at Ho - September, 1992.

20. Citation

- 1 In honour of envisioning and developing the B. Sc. (Health Administration) programme (started 2013) for the Faculty of Science Education of University of Education, Winneba – Given by the Department of Health Administration, June 22, 2023
- 2 In honour of meritorious service and benevolence to the St. Martin de Porres Roman Catholic Church at Mepe, Volta Region, Ghana – July 2022
2. On the occasion of retirement from the services of the University of Education, Winneba, after 22 years of dedicated service, September 26, 2014
3. In Honour of sterling leadership as Board Chairman for St. Kizito Senior High Technical School, Mepe, from November 2010 – November, 2016
4. In Honour of the sterling leadership quality as a Dean of the Faculty of Science Education, University of Education, 2010 – 2011, Academic Year. Given by Faculty of Science Education Students’ Association on April 30, 2011
5. In Honour of active participation in the Conferences of Special Education, contributions towards publications in the Journal of Special Education and introducing science teaching to people with disabilities From Association of Special Education Students, University College of Education, - Winneba (1999).

21. Membership of Professional Associations

- 1 Institute of Physics with Chartered Physicist status (U.K) - since 1997 to date
- 2 Ghana Science Association (GSA)- since 1996 to date

- 3 Ghana Association of Science Teachers (GAST) - since 1983 to date

22. Training Workshops Attended

1. Leading with authenticity. Organised by IOP Webinar – June 27, 2022
2. National Education Sector Annual Review. Organised by the Ministry of Education at Alisa Hotel, July 22 – 23, 2015
3. African Virtual University Teacher Education Curriculum Mapping and Review Workshop, Nairobi, Kenya from 20 – 25, November, 2013
4. Training Workshop for enhancing skills towards Internal Quality Assurance for Tertiary Institutions in Ghana organised by NAB and Agencies in Higher Education (INQAAHE), Accra, Ghana, Certificate awarded 23 – 24, October, 2013
5. Senior Academic Leadership Training (SALT II) Workshop by NCTE & Carnegie Corporation of New York at GIMPA, Accra, from 02 – 06 July, 2012
6. African Virtual University Teacher Education Curriculum Mapping and Review Workshop, Nairobi, Kenya, May 20 - 25, 2013
7. National Accreditation Board Stakeholders' Workshop by NAB in Accra, March 14, 2012
8. International Workshop on Science Education by INEES at Flensburg, Germany, February 11 – 18, 2012
9. Courseware Development Workshop, UEW, Winneba, January 25- 27, 2012
10. Mentoring Workshop by Gender Mainstreaming Directorate, UEW, Winneba March 23, 2011
11. International Workshop on Science Education by INEES at Dhaka, Bangladesh, February 14 – 18, 2011
12. International Workshop on Science Education by INEES at Ocho Rios, Jamaica, October 02 – 09, 2010
13. Workshop for UEW Deans, Directors, Heads of Department on Administration Management in Higher Education, Elmina Beach Resort, Elmina, Oct., 19 -20, 2010
14. Fifth Council for Advancement and Support of Education (CASE) in Africa Workshop/Conference, Accra, Ghana, October 06 – 08, 2009
15. Workshop for UEW Deans and Directors on Financial Management in Higher Education, Elmina Beach Resort, Elmina, Sept., 24 – 26, 2009
16. Workshop for Course Manual Writing at Manna Heights, Mankessim, September 02 - 04, 2009
17. Workshop for Project Management Training II at Elmina Beach Resort, Elmina, August, 11- 13, 2009
18. Workshop for drafting Strategic Development Plan for SACOST Centre at Manna Heights, Mankessim, June 22 – 24, 2009
19. Training Workshop for ICT Courseware Developers and Managers at Manna Heights, Mankessim, June 03 – 06, 2009
20. Workshop on Special M. Ed. curriculum development for Colleges of Education at Manna Heights Mankessim, February 25 – 28, 2009
21. Workshop on Project management Training organised by PRACTICAL Project, January 12, - 16, 2009 at Cape Coast

22. Workshop for editing Distance Learning materials – From October 19 – 23, 2008 at Koforidua, Ghana
23. Workshop on science and mathematics education in the specialised colleges of education October 12 – 16, 2008 at Royal Atlantic Resort, Aplaku
24. NPT Programme 155 PRACTICAL- strengthening Mathematics and Science Teacher Training Workshop – June 28 – July 12, 2008, Organised by Vrije University of Amsterdam, at Utrecht, The Netherlands.
25. Practical Project Workshop on development of course manual– June 09 - 11, 2008 at the University of Cape Coast, Ghana.
26. International Foundation for Science Grant Proposal Writing Seminar – April 04, - April 11, 2008 at University of Education, Winneba
27. Second Content Development Initiative Workshop for Website development – March 03 – 05, 2008 at University of Education, Winneba
28. Workshop/Conference on Meson and Nucleon Physics, Institute of High Energy Physics - Beijing, China, 31st July to 4th August, 2004
29. Conference on Harnessing Science Research and Technology for National Development –Accra International Conference Centre 15-19 March, 2004
30. African Summer Theory Institute – Cape Town, South Africa (Summer School), Jan. 9 – 31, 2004
31. Training workshop for Designing Modules for training JSS teachers in teaching Life Skills in science- sponsored by Ghana Education Service, Akropong-Akwapim, Ghana - Oct/Nov. 1999
32. Regional College on Optics education for Tertiary Level Teachers and Researchers at University of Cape Coast, Cape Coast, Ghana sponsored by Abdus Salaam Institute of Theoretical Physics, Trieste, April, 1999
33. Workshop for Instructional Design and Editing of Distance Education materials- sponsored by Simon Fraser University, U.S.A., at Winneba, Nov. 1998
34. STAG Project Development Workshop sponsored by AFCLIST, Winneba Oct. 1998
35. Seminar/Workshop for Universities Research Funded Researchers at - STEPRI, Accra, Feb. 1998
36. Training Workshop for Hall Counsellors, Winneba, Nov. 1997
37. New Year School – Organised by Institute of Adult Education (Legon) - Jan. 1997
38. Workshop for Distance Education Materials Writing, Winneba July, 1995
39. Test Item Writers Workshop- West African Examinations Council sponsored, Winneba August, 1991
40. Second West African Physics Teachers workshop at Ibadan, Nigeria- Ghana Association of Science Teachers sponsored, Sept., 1991
41. Trainer of Trainers Workshop –Primary Science Ghana Education Service sponsored, Ajumako, July, 1991
42. Trainer of Trainers Workshop – J.S.S. Science Teaching Ghana Education Service sponsored, Ajumako - Jan. 1990

23. Administrative Experience

1. Patron, Physics Education Students' Association (PHESA), University of Education, Winneba, 2019 – to date
2. Director, Quality Assurance Directorate, University of Education, Winneba, September 01, 2013 – July 31, 2017
3. Academic Counsellor for students, Department of Physics Education, University of Education, Winneba, for 2014 - 2023
4. Hall Fellow - University Hall (formerly GETFund), University of Education, Winneba, 2013/2014 Academic year
5. Ag. Pro-Vice-Chancellor – University of Education, Winneba, January 14 – 28, 2013
6. Hall Fellow – University Hall (formerly GETFund), University of Education, Winneba, 2012/2013 Academic year
7. Hall Fellow – University Hall (formerly GETFund), University of Education, Winneba, 2011/2012 Academic Year
8. Dean, Faculty of Science Education, University of Education, Winneba, Ghana. September 01, 2009 – August 31, 2013
9. Hall Fellow- Simpa Hall, University of Education, 2010/2011 Academic Year
10. Head, Department of Science Education, University of Education, Winneba, Ghana, Sept., 01, 2008 – August 31, 2009
11. Ag. Head, Department of Science Education, University of Education, Winneba, Ghana, November 01, 2002 – August 31, 2004
12. Departmental Examination Officer, 1996 – 2001
13. Science Education Departmental Time Table Officer, 1996 – 2001
14. Hall Counsellor, AMU Hall, University of Education, 1996-1998
15. Science Departmental Staff Secretary Advanced Teacher Training College, Winneba. 1984 – 1987
16. Chairman, Transport Committee, Advanced Teacher Training College, Winneba. 1989 – 1992
17. Hall Warden, Nana Ghartey Hall, Advanced Teacher Training College, Winneba. 1989 -1992
18. Assistant National Secretary, Ghana Association of Science Teachers, 1986- 1992
19. Regional Chairman, Central Region, Ghana Association of Science Teachers, 1984 – 1986
20. Hall Warden, Kotoka Hall, Advanced Teacher Training College, Winneba, 1984 - 1986
21. Sectional Head (Physics), Department of Science Advanced Teacher Training College, Winneba. 1983 – 1987

24. Experience in Editing and Reviewing Journal Articles

1. Consulting Editor, *The African Journal of Educational Studies in Mathematics and Sciences (AJESS)* of the Centre for School and Community, Science and Technology Studies (SACOST) of the University of Education, Winneba in the Institute for Educational Research and Innovation Studies (IERIS)– July, 2023 to date

2. Reviewer, *Journal of Educational Development and Practice (JED-P)* of Institute of Education, University of Cape Coast, Ghana – June 2011 to present
3. Edited 2 Units IEDE book (PSC 501 – PHYSICS 2 _ University Physics Made Easy) – April, 2010.
4. Edited entire IEDE book (ISC 511 – Energy – Four Units) – March, 2010
5. Reviewer, *Journal of Research and Development in Education*, since March, 2010
6. Editing distance learning materials for IEDE, from 2008 –present
7. Edited articles for World Conference on Science & Technology Education, ICASE 2007, to be held in Perth, Australia, 8 – 12 July, 2007
8. Writer and Editor, Distance Education materials, 1995 – 2001
9. Science Editor, Nyansapow Journal for Pre-University science students, 1996 - 1997

25. University Committees Served On and Community Service

1. Chairman, Committee to investigate purchase of vehicle tracking devices and delays in installing them, July 2024
2. Chairman, Committee to tour all Colleges of Education affiliated to UEW to find out their challenges and to make recommendations on ways of improving the affiliation – May – June, 2024
3. Member, Committee to investigate disagreement between staff of the German Unit of the French Education Department, UEW – April, 2024
4. Chairman, Committee to investigate French students' non-compliance with Year Abroad Programme tenets – March, 2024
5. Chairman, Committee to review draft copy of document for B. Sc. (Indigenous Science Education) programme for Faculty of Science Education, UEW, February – March, 2020
6. Chairman, Committee to investigate students' vandalism of properties on the North Campus. UEW, May – June, 2017
7. Chairman, Committee to investigate examination irregularity at the Department of Agricultural Education, College of Agricultural Education, Mampong – Ashanti, May, 2017
8. Leader, Team to compile data and complete survey (ACU Measures) for benchmarking universities within the Association of Commonwealth Universities, February – May, 2017
9. Donated 10 copies of own published book: *The status and quality of continuous assessment in JHS in Ghana* by M. K. Amedeker (2016) published by Scholars Press, Germany to UEW Libraries on all four campuses, February 06, 2017
10. Leader, UEW Team to compile data and complete a survey for competing in 2016 UI GreenMetric World University Ranking competition, October 2016
11. Member, Academic Planning Committee, UEW, August 01, 2016 – July 31, 2017
12. Chairman, Committee to investigate an alleged examination malpractice in the Department of Agricultural Education, College of Agricultural Education, Mampong – Ashanti, June – July, 2016

13. Member, Committee to investigate an alleged examination malpractice in the Department of Biological Sciences Education, College of Agriculture Education, Mampong - Ashanti , June, 2016
14. Chairman, Committee to investigate an alleged examination malpractice in Early Childhood Education Department, UEW, - June, 2016
15. Chairman, Committee to investigate an alleged irregular attendance to work by a conservancy labourer in the University Hall UEW, - May 2016
16. Chairman, Committee to draft proposal for building database for UEW students' theses, dissertations and projects, March, 2016
17. Chairman, Committee to investigate recurrence of issues of non-cooperation in the Department of French Education, University of Education, Winneba, September – December, 2015
18. Chairman, Committee to investigate complaints of discrimination and non-promotion written by a Finance staff, August – September, 2015
19. Chairman, Committee to investigate alleged stealing of HPERSSA track suits and branding for Challenging Heights, Winneba, July 2015
20. Chairman, Committee on installation of Closed Circuit Television (CCTV) Cameras on campuses of University of Education, Winneba, June 2015 - July, 2015
21. Member, Disciplinary Board to investigate falsification of examination results at the College of Technology of University of Education, Winneba, Kumasi Campus, May, 2015
22. Chairman, Committee to investigate burglary at the Techiman Distance Education Study, April – May, 2015
23. Member, University of Education, Winneba Search Committee for Principal for UEW College of Technology Education, Kumasi Campus, January – February, 2015
24. Member, Committee to establish modalities for integrating the National Sports College into mainstream administration of the University of Education, Winneba, October, 2014
25. Chairman, Disciplinary Committee to investigate alleged examination malpractice in Basic Education Department during 2014 Sandwich period, September – October, 2014
26. Chairman, Disciplinary Committee to investigate alleged misconduct of two staff in the Environmental Health and Sanitation Unit, University of Education, Winneba, from October 01, 2014 - November, 2014
27. Member, Academic Board sub-committee to fine-tune draft Quality Assurance Policy document for the University of Education, Winneba, September 15 – 30, 2014
28. Chairman, Committee to develop Sandwich curriculum for B. Sc. Health Administration and Education (Nursing Administration Option) for the Department of Health Administration and Education, University of Education, Winneba
29. Chairman, Committee to investigate an alleged examination malpractice in the Department of Basic Education, University of Education, Winneba during the first semester of 2013/2014 academic year, Jan. – Feb., 2014

30. Member, Committee to Draw Strategic Plan, 2014 – 2019 for University of Education, Winneba, September 2013 – February 2014
31. Member, Disciplinary Board to prescribe sanctions to senior members involved in issues concerning Sandwich Examinations in the Department of Basic Education, University of Education, Winneba, September, 2013
32. Chairman, Investigation Committee to investigate an alleged examination leakage in the Department of Basic Education, UEW during the 2013 Sandwich Examinations, July 31. 2013 – August 27, 2013
33. Chairman, Disciplinary Committee to investigate and prescribe sanctions for students caught smoking marijuana at UEW North Campus, May, 2013
34. Chairman, Committee to investigate disciplinary issues in the Department of French Education, UEW, May – June 2013
35. Chairman, Committee to investigate issues of lack of cooperation of a lecturer of the French Education Department, UEW with the Head of Department, April – June, 2013
36. Member, Appointment and Promotion Board Sub-Committee to review the criteria for promotion for Senior Members of UEW, May – June, 2013
37. Member, Disciplinary Board to study the report of an investigation Committee and a Disciplinary Committee and prescribe sanctions against a Senior Member of COLTEK, UEW – Kumasi Campus, February 21 – July 23, 2013
38. Member, Finance Committee, Academic Board Representative, 2012/2013-2013/2014 Academic year
39. Member , Appointments and Promotions Board, UEW – 2012/2013 Academic year to 2015/2016 Academic year
40. Member, Committee to investigate impropriety in submission of published papers for promotion in the University of Education, Winneba - June, 2012
41. Chairman, Committee to investigate theft case at Maputo Court, Ghana Hostels, involving a student – May, 2012
42. Chairman, Committee to draft Risk Management Policy for University of Education, Winneba, December, 2011
43. Chairman, Committee to draft the curriculum of the Health Education programme for the Department of Health, Physical Education, Recreation and Sports, University of Education, Winneba, August, 2011
44. Member, Committee to draft policy on journal publication in the University of Education, Winneba, June, 2011
45. Chairman, Committee to investigate unlawful entry into a students' online portal by a colleague at UEW, April, 2011
46. Chairman, Committee to produce draft policy document on students' elections at UEW, March, 2011.
47. Chairman, Committee to produce recommendations for relocation of the North Campus Market at UEW, January, 2011
48. Member, Committee to study document on setting up two public Universities (UNER & UHAS), August, 2010
49. Chairman, Farm Management Committee, UEW, 2010/2011 – 2016/2017 Academic years

50. Member, Committee to investigate doctoring of procurement document, Feb, 2010
51. Member, Committee to investigate reported non-performance of UEW graduates in the pre-tertiary schools, Dec., 2009 – March, 2010
52. Member, Finance Committee, Academic Board Representative, 2009/10-2011/2012 Academic year
53. Chairman, Committee to investigate reported grade discrepancies in papers written in Akan-Nzema, September 16 – 24, 2009
54. Chairman, Disciplinary Committee to prescribe punishment for Embezzlement of Funds, June, 2009
55. Member, Finance and Development Planning Committee – 2009/2010 Academic year
56. Member, Implementation Committee, Teacher Education in Sub-Saharan Africa, (TESSA) April, 2009 – July, 2015
57. Member of the University of Education, Winneba, Academic Board, 2008/2009 academic year
58. Member of Faculty Board, Faculty of Science Education, University of Education, Winneba, 2008/2009 to 2012/2013 academic years
59. Member of University of Education Academic Board, 2002/2003 & 2003/2004 2008/2009 to 2012/2013 academic years
60. Member , University Estate Management Committee - Oct. 2003 - Feb. 2005
61. Member, University Committee to investigate Admissions Malpractice - Oct., 2003
62. Chairman, University Committee to investigate Examinations Malpractice Sept., 2003
63. Chairman, Senior Members and Senior Staff Association (SEMSA), University of Education, Winneba, 1999 – 2001
64. Board Member, UCEW WINDY BAY F.M. RADIO, 1999- 2001
65. Member, Committee for restructuring of academic programmes - Sept. 2000
66. Member, Education Sector analysis Committee – University College of Education, Winneba, Ghana - Sept. 1998
67. Member, Sub-Committee on Free Compulsory Universal Basic Education - Academic Board Appointment - Feb. 1996
68. Board Member - Faculty of Science Education, University College of Education, Winneba. Ghana - 1995 – 1996

26. National Committees Served On

- 1 Member, Governing Council of National Inspectorate Board of the Ministry of Education, Ghana, May, 2016 – January, 2017
- 2 Member, National Accreditation Board Academic Audit team, 2010 to date
- 3 Ministry of Environment, Science and technology sub-committee to select students for MASTESS Scholarship Scheme, January 2015
- 4 University of Education Representative on Ghana Examinations Committee at WAEC, January 2011 – August, 2022

- 5 Ministry of Environment, Science and Technology sub-committee to select students for MASTESS Scholarship Scheme January, 2011
- 6 Chairman, Board of Governors, Mepe St. Kizito Senior High/Technical School, Mepe, Volta Region, Ghana – November 05, 2010 – October, 2016
- 7 University of Education Representative on National Accreditation Board’s Institutional Quality Assurance panel – April, 2010 - 2012
- 8 University of Education’s Representative - Working Committee of the Ghana Academy of Arts and Sciences, 1998 – 2001
- 9 Member, National Working Panel to review the WASSCE Core Science Syllabus –appointment by West African Examinations Council - June, 2001
- 10 Member, Working Committee to compile the Integrated Science Syllabus for Senior Secondary Schools – West African Examinations Council sponsored - May, 1998
- 11 Member, Working Committee to Review the Junior Secondary School Science Syllabus – Ghana Education Service sponsored, July/Aug. 1997

27. Interests and Hobbies

- Gardening
- Observing nature
- Swimming

28. Initiatives or Achievements

- 1 Sole writer of draft of B. Sc. (Indigenous Science Education) programme for the Faculty of Science Education, UEW, January – February, 2020 – Accepted by Faculty
- 2 Sole writer of draft Quality Assurance Policy document for University of Education, Winneba during the 2013/2014 academic year
- 3 Sole writer of proposal for funding from DAAD (Germany) for science teacher training cooperation with University of Flensburg, considered for 2014
- 4 Leader, team to develop B. Sc. (Health Administration and Education) programme creation of Department of Health Administration and Education as part of the Faculty of Science Education – programme started in 2013/2014 Academic year
- 5 Development of Faculty Handbook for academic programmes in the Faculty of Science Education- realised in 2012/2013 academic year
- 6 Development of Departmental Undergraduate and Graduate Handbooks for all departments of the Faculty of Science Education – realised in 2012/2013 academic year

- 7 Decoupling the Science Education Department into Physics Education, Chemistry Education, Biology Education and Integrated Science Education Departments – realised in 2009
- 8 Initiated collaboration of Department of Science Education, University of Education, Winneba with Central Connecticut State University, USA and succeeded in obtaining initial 40 computers to establish a Graduate Computer Laboratory at the Department of Science Education, 2009
- 9 Proposal for extension of Science Faculty Block – reconstructed from 2006 and completed 2012

29. Research Interests

1. Integration of assessment with instruction for supporting students' learning of science
2. Integration of ICT into instruction in science
3. Assessment and Evaluation
4. Teacher professional development
5. Teacher Education/Physics Education
6. Backward meson production and photo-production of mesons and coupling of mesons to nucleons

30. Referees

- a. Prof. Samuel Asiedu-Addo
Former Dean, Faculty of Science Education
Email: samasieduaddo@yahoo.com
Mobile: +233 (0) 243518385

- b. Prof. A. Asabere-Ameyaw
Former Vice-Chancellor, UEW
Email: aaameyaw@uew.edu.gh
Mobile: +233(0) 244 314 781

- c. Prof. Victor Antwi,
Pro-Vice-Chancellor, UEW
Email: vantwi@uew.edu.gh
Mobile: +233 (0) 559393224

Signed:



9th June, 2024