

**Prof. Kodjo Donkor Taale, PhD Updated CV**  
([http://www.researchgate.net/profile/Kodjo\\_Taale/](http://www.researchgate.net/profile/Kodjo_Taale/))

## Profile and Areas of Competence

Specialised competencies in the following:

- Extensive experience and skills in conceptualisation, design, implementation, maintenance and evaluation of University and Departmental programmes in science and technology education (STE).
- Excellent oral and written communication skills.
- Development of key strategies for the evaluation, supporting and funding of cutting-edge research and service programmes in S & T Education.
- Providing leadership and vision in the areas of STE research. Strong ICT background.
- Consistently meet tight deadline schedules within dynamic environments.
- Providing leadership to senior members of institutional management in the departments but equally comfortable interfacing with all levels of staff.
- Provision of strategic advice to institutional management committees in accordance with internal and external guidelines and legislation of the University.
- Very competent in teaching Physics at all levels and well versed in Science Education policies and concepts.

## Personal Details

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|--------------------------|--|
| <b>Name:</b>             | <b>Kodjo Donkor Taale</b>  |
| Date and place of birth: | July 7, 1955; Akaa-Buem, V.R., Ghana   |
| Nationality:             | Ghanaian   |
| Marital status:          | Married  |
| Children:                | 9  |
| Postal Address:          | Department of Physics Education,<br>University of Education, P.O. Box 25, Winneba, Ghana   |
| Residential address:     | Street 1, Rafiki Methodist Orphanage Road, Gyahadze,<br>Winneba  |
| Telephone:               | +233 244586953 / 274492542 / 263679904   |
| Email:                   | <a href="mailto:kdtaale@uew.edu.gh">kdtaale@uew.edu.gh</a> / <a href="mailto:kdtaale@gmail.com">kdtaale@gmail.com</a> / <a href="mailto:ktaale@yahoo.com">ktaale@yahoo.com</a> |
| Current Position:        | Associate Professor  |
| Criminal offences:       | None   |
| Health:                  | Excellent  |

## Professional and Managerial Experience

- March 24, 2023 -March 27, 2023: Held brief for Dean, Faculty of Science Education
- February 13 - July 31, 2023: Academic Counsellor for **Level 300 Students**, Department of Physics Education

- March 1, 2022-July 31, 2023: Academic Counsellor for **Level 300 Students**, Department of Physics Education
- August 2020 -July 2021: Head, Department of Integrated Science Education
- August 2019 -July 2020: Head, Department of Integrated Science Education
- August 2018 –July 2019: Head, Department of Integrated Science Education.
- August 2013 - July 2014: Ag. Head, Department of Physics Education.
- Aug. 2010 – July 2011: Head, Department of Physics Education.
- Aug. 2008 – July 2009: Head, Department of Science Education.
- Sep. 2007 – Aug. 2008: Head, Department of Science Education.
- Sep. 2006 – August 2007: Head, Department of Basic Education.
- 1998 – 2006: Head of Physics Section, Department of Science Education.
- 1993 -1995: Teaching Practice Representative, Department of Science Education.
- Jan. 1994 – Sep. 1995: Examination Officer (Department of Science Education).
- Sep. 1993 – Dec. 1993: Examination Officer, Science and Mathematics Education Departments.

## **Qualifications**

B.Sc (Hons) Physics and Mathematics, University of Ghana, Legon, 1977

M.Sc (Physics), University of Cape Coast, Ghana, 1984

PGCE (Science Education), University of Cape Coast, Ghana, 1987

Certificate in French, Université Du Bénin, Lomé, Togo, 1987

M. Ed. (Science Education), University of Leeds, U.K., 1996

Ph.D (Science Education), University of Cape Coast, Ghana, 2004

## **Courses taught at Undergraduate level since 2000**

General Physics, especially: Mechanics & Properties of Matter; Electrical Energy & Power Distribution; Solar & Atmospheric Physics; Solid State Physics; Introductory Mathematics for Science Students; Measurement, Assessment & Evaluation in Science Education; On-Campus Teaching Practice; Atmosphere, Climate and Earth Movement; Heat & Thermodynamics; Atomic & Nuclear Physics; Electronics II; Curriculum Studies in Physics Education; Methods of Teaching Physics.

## **Courses taught at Postgraduate level since 2000**

- ❖ Principles & Practice in Curriculum Development & Evaluation in Science
- ❖ Science Teacher Education & Internship
- ❖ Seminar Directed Readings in Science Education
- ❖ Science Concept Formation & Development

- ❖ Research Methods in Science Education
- ❖ Advanced Quantum Mechanics
- ❖ Advanced Nuclear Physics

**Courses taught at Postgraduate level for *ITECPD* (Postgraduate Diploma in Teaching and Learning in Higher Education)**

1. Managing Teaching and Learning in Higher Education
2. Academic Research
3. Seminar Paper Presentation
4. Internship and Portfolio Building

**Courses taught at Postgraduate level for *IDeL* (MEd Science Education)**

1. Research Methods in Science Education
2. Science Teacher Education & Internship
3. Foundations of Science
4. Geometrical and Physical Optics & Quantum Physics
5. Electromagnetism, Atomic & Nuclear Physics
6. Advanced Nuclear Physics

**Areas of Speciality**

1. Solar Energy Research
2. Assessment and Evaluation in Science Education.
3. Physics and Physics Education Research.

**DIPLOMA AND BED LONG ESSAYS SUPERVISED with all students completing**

| Year      | Number of students supervised |
|-----------|-------------------------------|
| 1993/1994 | 7                             |
| 1994/1995 | 6                             |
| 1996/1997 | 5                             |
| 1997/1998 | 5                             |
| 1998/1999 | 5                             |
| 1999/2000 | 1                             |
| 2000/2001 | 9                             |
| 2001/2002 | 10                            |
| 2002/2003 | 11                            |
| 2003/2004 | 12                            |

|            |     |
|------------|-----|
| 2004/2005  | 11  |
| 2005/2006  | 12  |
| 2006/2007  | 13  |
| 2007/2008  | 14  |
| 2008-2009  | 13  |
| 2009-2010  | 12  |
| 2010 -2011 | 20  |
| 2012 -2019 | 100 |
| 2019 -2020 | 11  |
| 2020 -2021 | 12  |
| 2021-2022  | 11  |
| 2022-2023  | 18  |

## **2001 – Date: External Examiner**

### **Ph.D. Theses**

1. Ph.D. Candidate: Elaosi, Vhurumuku  
Topic: An investigation of Zimbabwe A-Level Chemistry Teachers' Epistemological Beliefs, laboratory Instructional practices and Students' images of the Nature of Science (Department of Didactics, Faculty of Education, University of Western Cape, Belleville, Cape Town, South Africa, 2004)
2. Ph.D. Candidate: Ishmael, Kwesi Anderson  
Topic: The Relevance of Science Education As seen by pupils in Ghanaian Junior Secondary Schools (School of Science and Mathematics Education, University of Western Cape, Belleville, Cape Town, South Africa, 2007).
3. Ph.D. Candidate: **LAWRENCE SARPONG:**  
Topic: "Determination of Science Teachers' Professional Teaching Standards in Greater Accra Region" University of Cape Coast, 2019).
4. Ph.D. Candidate: **AMINU ALIYU:**  
Topic: "Status of Teaching and Learning of Science in Junior Secondary Schools in Kebbi State, Nigeria" (University of Cape Coast, 2021).
5. Ph.D. Candidate: **ANTHONY DADZIE:**  
Topic: "State of Biology Teaching in Public Senior High Schools in the Cape Coast Metropolis" (University of Cape Coast, 2022).

6. Ph.D. Candidate: **EMMANUEL LARBI APPAW:**  
Topic: “Investigating the Reflective Practice of Biology Teachers at the Senior High School Level” (University of Cape Coast, 2023)

### **Masters Dissertations**

❖ *University of Cape Coast*

7. **MR. ISAAC SONFUL COFFIE:** “Perceived impact of continuous professional development programme on Physics teaching at the Colleges of Education in Ghana” (MPhil.) (2019)
8. **ISAAC NEWTON AVOR:** Factors influencing students’ interest and achievement in learning Physics at the Senior High School level”. (MPhil.) (2020)
9. **REJOICE ELIKEM VORSAH:** “Investigating the Teaching and Learning of Mole Concept”. (MPhil.) (2020)
10. **KWASI AGYENIM-BOATENG:** “Effect of Concept Map on SHS Students’ Achievement in Biology” (MPhil.) (2020)
11. **PERPETUAL COKER APPIAH:** “Factors affecting low performance of Senior High School students in Integrated Science” (MPhil.) (2020)
12. **BENJAMIN ANIM-EDUFUL:** “Chemistry Teachers’ and Students’ Conceptual Understanding of Organic qualitative Analysis”. (MPhil.) (2021)  
➤ *University of Western Cape, Belleville, Cape Town, South Africa*
11. **Hilda, Belinda Dennis:** “Integrated Science Education at the JHS Level and the promotion of critical thinking among Pupils in Cape Coast”. (MPhil.2022)
13. **David, Osei Mensah:** “Teacher Influence on Students’ Performance in Learning hydrocarbons in some selected Senior High Schools” (MPhil. 2023)
14. **Abigail, Vander Bosscher:** “The effect of Computer Aided Instruction (CAI) on Junior High Schools Students’ Achievement and Retention in Integrated Science” (MPhil. 2023)
15. M.Ed. Candidate: Alphonso, John Hendricks  
Topic: The effect of Computer Simulation Programme on promoting conceptual understanding of electricity amongst First Year peninsula Tecknikon Science students (School of Science and Mathematics Education, University of Western Cape, Belleville, Cape Town, South Africa, 2001).
16. M.Ed. Candidate: Gilbert, Dolo  
Topic: Difficulties encountered by Grade Ten Township Learners with respect to the concept of electricity (School of Science and Mathematics Education, University of Western Cape, Belleville, Cape Town, South Africa, 2012).
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### **Examined Ph.D. (Internal) for:**

1. Ph.D. Candidate: Vida, Eshun  
Topic: Science Teachers’ Pedagogical Content Knowledge and its exhibition in classroom practice: A Case study in the Accra Metropolis (Department of Science Education, University of Education, Winneba, Ghana, 2014).
2. PhD Candidate: Nelly Adjoa, Sakyi-Hagan  
Topic: Effect of Predict-Observe-Explain Model-Based Interactive teaching on the

Nature and Quality of Pre-Service Teachers' Explanations in Science  
(Department of Science Education, University of Education, Winneba, Ghana,  
2023).

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➤ **Ghana Tertiary Education Commission (GTEC) – *Promotion to Senior Tutor in Colleges of Education***

1. Mr. Isaac Asare (2019)
  2. Mr. Eric Appiah-Twumasi (2019)
  3. Mr. Anaafo Yin (2019)
  4. Mr. Johnson Kofi Ackah (2019)
  5. Mr. Abudulai Adam (2019)
  6. Dr. Samuel Appah (2020)
  7. Mr. Richard Akwasi Frimpong (2020)
  8. Mr. Wilson Nketsia Siaw (2020)
  9. Mr. Isaac Sonful Coffie (2020)
  10. Mr. Emmanuel Eshun (2020)
  11. Mr. Francis Quansah (2020)
  12. Mr. Haruna Tahiru Zingani (2020)
  13. Mr. Kojo Amuah Prah (2021)
  14. Mr. Humphrey, Assem Darkeh (2023)
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**Review of Scripts: *B.Ed (Basic Education) (September 2009)***

| <b>COURSE</b>                            | <b>NUMBER OF SCRIPTS</b>                         |
|--|--|
| EIN 262 – Integrated Science 2010        | 37   |
| EIN 262 – Integrated Science II 2007/08  | 43   |
| EIN 262 – Integrated Science II 2008/09  | 44   |
| EIN 262 - Integrated Science II 2006/07  | 43   |
| EIN 423 – Integrated Science V Nov. 2009 | 44   |
| EIN 423 – Integrated Science 2007/08     | 32 - <i>Total No. of scripts submitted = 243</i> |

**MEd & MPhil Theses Supervised and completed**

| Year        | MED                        |                           | MPhil                      |                           | PhD                       |
|-------------|----------------------------|---------------------------|----------------------------|---------------------------|---------------------------|
|             | No. of students supervised | No. of students completed | No. of students supervised | No. of students completed | No. of students completed |
| 2005 – 2020 | 33                         | 29                        | 32                         | 28                        | 2                         |
| 2021 - 2023 |                            |                           |                            | 1                         | 2                         |

### MEd. & MPhil. Theses Supervision Ongoing

| Year               | MED             | MPhil           |
|--------------------|-----------------|-----------------|
|                    | No. of students | No. of students |
| 2018 – April, 2023 | 10              | 12              |

### MPhil. Theses Supervised and completed

1. **Akpanglo-Nartey, Richard:** Children's indigenous ideas and the learning of school science 2008
2. **Addo-Wuwer, Fortune:** Addressing Senior High School students' Integrated science graph work problems using computer-based tutorials 2009
3. **Frimpong, Richard Akwasi:** The influence of culture on the teaching and learning of science at the Junior High School 2009
4. **Sedegah, Samuel:** The influence of cooperative learning approach on Senior High School students' understanding of ionic bonding in Integrated Science 2009
5. **Asiwome, Kwadwo Amevor:** Investigation into practical skills of science teacher trainees in science and mathematics Colleges of Education. 2009
6. **Azonu, Rosemary:** Using classroom assessment to enhance the teaching and learning of science at the Junior high School level in Ghana. 2009
7. **Davor, Rexford Johannes:** Factors influencing students' physical science enrolment decision in the University of Education, Winneba. 2009
8. **Klutse, Geoffrey Yao:** A novel approach to the teaching and learning of Integrated Science in a Ghanaian Junior High School. 2010
9. **Dotse, Raphael Nuseli Djoe:** Investigating the mode of assessment in the sciences in the Colleges of Education in Ghana 2010
10. **Amankwaa, Lydia Tima:** Integrating indigenous knowledge in the teaching and learning of science at the Senior High School 2010
11. **Anafo, Yin:** Junior High School science teachers' views about the nature of science and science teaching 2010

12. **Darkeh, Assem Humphrey:** The science teacher trainee's understanding of geometrical optics 2010
13. **Quansah, Rebecca Esi:** In-service needs of Junior high School Integrated Science teachers to improve competency in science instruction in the Central Region of Ghana. 2011
14. **Owusu, Frank Ansah:** Assessing the effect of conceptual change approach on students' understanding of the mole concept: A case study at Wesley College of Education. 2012
15. **Koranteng, Rachael:** The effects of multiple representations-based instruction on students' performance in physics: Exemplary lessons on electricity at the Senior High School. 2012
16. **Ajukwu Vivian Uchechukwu:** Students' perceptions of energy: A study in Senior High Schools in Ghana. 2012
17. **Asano, Rita:** Academic background and needs of students for effective teaching and learning of Integrated Science at the Senior High Schools in the Central Region of Ghana. 2012
18. **Adane, Samuel:** The effect of students' preconceptions on the learning of Physics in Senior High Schools in the Greater Accra Metropolis.
19. **Agyeman Duah, Grace:** Leveraging resources in science instruction in Colleges of Education in the Eastern Region of Ghana. 2014
20. **Osei, Elizabeth:** The influence of headteachers' leadership on basic science programme: Perception of headteachers, assistant head and science teachers in the New Juaben Municipality in the Eastern Region of Ghana. 2014
21. **Dei-Boakye, Juliana:** Improving students' conceptual understanding of Kinematic graphs using Microcomputer Based Laboratory. 2020
22. **Osei-Himah, Valentina:** Using Peer tutoring to Enhance Pre-Service Teachers' performance in Physics: A Case Study at Atebubu College of Education. 2021
23. **Asare, Isaac:** Investigating the use of Web-Based Technology Software in Teaching Biology in the Colleges of Education in Ghana. 2021
24. **Zonyira, Michael Senyo Kwasi:** The Effect of concept Mapping on Preservice Science Teachers' Achievement in Aliphatic Hydrocarbons. 2021
25. **Siaw, Wilson Nketia:** Self-Efficacy beliefs of Junior High School Science Teachers on Pupils' Performance in Asante Manpong Municipality. 2021
26. **Dogbey, Robert Pavlov Kwadwo:** Using Concept Mapping Strategy to Improve the Teaching and Learning of Mole Concept in Keta Business college. 2021
27. **Karim, Ali Alhassan.** Science Student Teachers' Perception of Internet Use on their Performance in Science at some selected Colleges of Education in the Northern Region. 2021
28. **Dugah, Joshua.** The Effect of 5E Model of Instruction on the Academic Performance of Students in some selected Topics in Integrated Science. 2021
29. **Agbemaflle, Ebenezer Duku:** Using computer Assisted Instruction to Improve Students' Academic Performance in Integrated Science in Juaboso Senior High School. 2021
30. **Baakun, David Kapori:** Integrated Science teachers' use of Practical Work as a Teaching Approach in Junior High Schools in the Nanumba North Municipality in Northern Ghana. 2021
31. **Boakye, Paul Asiamah.** Extent of Integration of Practical Activities in Teaching and Learning of Chemistry in Ghanaian Senior High Schools. 2021



32. **Kpemuonye, Alban Kaningen Nubazung.** Effect of Hands-On Activities on Students' Performances in the Teaching of Selected Topics in Biology. 2022
33. **Tampaa, Alfred.** Effect of Practical Activities on Students' Academic Achievement in Some Selected Topics in Integrated Science. 2022
34. **Kusi, Eric Kwaku.** Investigating the Causes of Junior High School Students' Poor Academic Performance in Integrated Science in Adansi North District. 2023
35. **Edward, Bariam.** Improving Senior High Students' Academic Performance in Selected Concepts in Integrated Science through Differentiated Instruction. 2023

#### **MEd. Dissertations Supervised and completed**

1. **Okalapuinye, Isaac Kofi Okumasi:** Perception of health hazards of pesticide usage by Senior Secondary school students: A case study of New Juaben Municipality. 2008
2. **Obeng Nyarko, Ernest:** Performance of science students of Colleges of Education in teaching of science in the basic school. 2009
3. **Adjo, Margaret Enyonam:** Using classroom assessment as a tool to enhancing the teaching and learning of science at some selected Upper primary Schools in the Lower Manya Krobo District, Eastern Region. 2009
4. **Essilfie, Josephine Emma:** The influence of Science, Technology and Mathematics Education (STME) s Clinics on the attitude and achievement of Senior Secondary School Girls in science in New Juaben Municipality. 2009
5. **Marfo, Patricia:** Using the jigsaw cooperative learning model to improve the teaching of Integrated Science in Primary and Junior High Schools. 2009
6. **Asare-Gainson, Thomas Kofi:** The influence and effects of religious and traditional belief systems on students' learning of science: A case study at Sefwi Wiawso community junior High Schools. 2010
7. **Parker Clarke, Dorothy:** Learning styles of physics students in the Senior High Schools in the Accra Metropolis. 2010
8. **Hinson, James:** Improving teacher education in Ghana: Investigating the impact of the one year internship programme on the professional and the pedagogical development of teacher trainees in science teaching. 2011
9. **Parker, Joseph:** Using improvised instructional materials to help Diploma in Basic Education One students overcome difficulties they face in learning acids and bases in Enchi College of Education 2011
10. **Gyampeh, Cynthia Mawuse:** The importance of mentoring and supervisory practices on pre-service teachers for developing effective primary science teaching 2011
11. **Osei, Valentina Atuabea:** Helping pre-service teachers at Atebubu College of Education to understand basic electronics through practical activities 2013

12. **Toffay, Joyce:** The impact of Science Resource Centers in science teaching in the Western Region of Ghana 2013
13. **Ologo, Daniel:** The effects of practical work on students' understanding on some selected topics in physics: A case study at St. Rose's Senior High School, Akwatia
14. **Al-Shakur, Atta Baidoo:** Factors that influence pupils' attitude towards teaching and learning of science in three selected Junior high Schools in Assin North Municipality
15. **Osei-Manu, Frank:** Integrating modern pedagogical skills in the teaching of science at the Aboadze/Abuesi Junior High School in the Shama District, Western Region. 2014
16. **Gakpo, Dorcas Dela:** The impact of laboratory work on students' performance in chemistry: A case study at Juaso Senior High Technical School. 2014
17. **Gyetteh, Sam Kwamena:** Improving academic performance of Physics students using problem solving strategies and regular classroom tests. 2015
18. **Tadzo, Richard:** using practical work to improve students' understanding of selected topics in Biology. 2015
19. **Iddrisah, Senale:** The impact of Instructional Materials on the Academic performance of students in Integrated science at Bia SHTS. 2017
20. **Owusu, Gideon:** Using laboratory practical activities to help science students of Methodist SHTS improve upon their performance in solving problems related to forces. 2017
21. **Mahamud, Jacob Batong:** Factors influencing female enrolment in Physics in Sissala Municipality of the Upper West Region, Ghana. 2018
22. **Osafo-Parry, Shiloh Kwame:** Impact of Information and Communication Technology on the teaching and learning of Physics in SHSs in the Adansi North District. 2018
23. **Tampaa, Alfred:** Using Target-tasked Problem-solving Model to enhance teaching and learning of electronics in Physics at Islamic SHS, Wa Municipality. 2019
24. **Attaaku, Emmanuel Word:** Perception of factors that affect the performance of Female students in Physics: A Case study at Nana Brentu SHTS. 2019
25. **Frimpong, Martin:** The impact of Guided Inquiry-Based Learning on learning of Thermal Physics: A Case Study at Ndewura Jakpa SHTS. 2019
26. **Musa, Mumuni:** Teaching and learning of Physics in Ghanaian SHSs: A study in Greater-Accra Region. 2019
27. **Ahiaku, Elikem Israel:** A Combined Approach to teaching Natural science in Primary 3: Quasi Experimental Study in St. Francis College Demonstration School, Hohoe. 2019
28. **Binyam, Jubam Jilimah:** The use of Teaching and learning materials and its impact to whip up the interest and performance of Form Two Home Economics students towards the study of Integrated science in E.P. SHS, Saboba in the Northern Region of Ghana. 2020
29. **Twumasi, Seth Kwasi:** Using Computer Animation and Videos to enhance students' understanding of Elastic and Inelastic Collisions. 2021
30. **Nafisah, Baba:** Using a Model (TLMs) to assist Female Junior High School Pupils Demonstrate Rectilinear Propagation of Light in Bongo District. 2022
31. **Nana Osei Amoako:** Investigating the Effectiveness of Computer Assisted Instructions in the Teaching and Learning of Selected Topics in Chemistry. 2023
32. **Evelyn Oduro Kwakye:** The Impact of Activity-Based Teaching Method on Teaching Concept of Acids, Bases and Salts at Kumasi Girls' Senior High School 2023

33. Gloria Ama Akotia: Investigating the Impact of Using Computer-Based Simulations in Teaching Chemical Reaction Rate in Toase Senior High School. 2023

#### **PhD theses, supervised and completed**

1. **Hanson, Ruby:** Using Microchemistry Equipment to improve teacher trainee alternative conceptions of some organic chemistry topics. 2015
2. **Attafuah, Peter:** using FAST feedback methods to enhance students' learning chemistry: A case study in Yilo Krobo Senior High School. 2016
3. Ayikue, Ambrose: Employing Mobile Pedagogy as a Model for Instruction and Assessment: A Case Study at St. Francis College of Education, Hohoe, Ghana. 2023
4. Eminah, Cosmos: Effect of ICT-Based Intervention on Conceptual Understanding and Performance of Student-Teachers in Selected Concepts in Physics. 2023

#### **PhD theses supervising, and at various stages of completion**

1. Ayelsoma Jonathan: *appears to have abandoned programme*
2. Addo-Wuver, Fortune: Implementation of the Physics Curriculum across selected Senior High Schools in Ghana.
3. Quansah, Rebecca: Basic School Science Teachers' Curriculum Knowledge, Self Efficacy Beliefs Classroom Practices Towards Implementation of the Stand Based Curriculum.
4. Essiam, Charles: Experiences of Pre-Service Teachers on the UEW Programme: The Quality Practice.
5. Nti, Daniel: Assessing the Effect of Learning Styles on Co-operative Learning and Performance in Integrated Science.
6. Awuku, Emma: Factors influencing the academic performance of students in Teaching and Learning Chemistry in Mfantiman Girls School.
7. Anankabiik, Awonbiik Joseph: Investigating the effectiveness of Inquiry-Based Learning and Teaching Physics in Ghanaian High Schools.
8. Asare, Alexander Hero Yawo: Teaching Basic Electronics Using Scratch Game Interaction among JSS One Pupils in BACE Model School, Tamale.
9. Antwi, Obed Kojo: Challenges of Teaching Genetics in Ghanaian SHS. The Perspective of the Integrated Science Teacher.
10. Assuming, Doris Osei: Science Teachers Self-Efficacy, Beliefs, Attitude Towards and Perceptions of the SHS biology Programme.

#### **Prizes, travel grants and awards, with dates**

- Won a UNESCO Pilot African Academic Exchange (UPAAE) Fellowship at the School of Science and Mathematics Education, University of the Western Cape, Cape Town, South Africa, 14<sup>th</sup> February -13<sup>th</sup> August, 2001.  
**Funding:** The African Forum for Children's Literacy in Science and Technology (AFCLIST)      **Amount:** US \$ 11,280.00  
Was Project Leader: February 1999- December 2001.
- Programme Reform and Alignment for increasing Competencies of Teachers and for Improving Comprehension and Application in Learning science and mathematics (**PRACTICAL**) Project Workshop on course Development and

Analysis of course design, June 10 –July 7, 2007, Centre for International Cooperation, Vrije Universiteit Amsterdam, The Netherlands.

- **Programme Reform and Alignment for increasing Competencies of Teachers and for Improving Comprehension and Application in Learning science and mathematics (*PRACTICAL*)** – Training Programme for the improvement of mathematics and Science Teacher Training and research in Ghana, June 28 – July 12, 2008, University of Utrecht, Utrecht, The Netherlands.
- **September 24, 2008 –December 18, 2010:** Resource person (Integrated Science) –Development of Senior Secondary Education Project (DSSEP) In-Service Training of Senior High Schools (SHS) and Technical Institutes Core Subject Teachers of English, Mathematics, Integrated Science and Social Studies. Ministry of Education Science Resource Centre, Cantonments, Accra.

**WORK AS A UPAAE FELLOW AT THE UNIVERSITY OF THE WESTERN CAPE, CAPE TOWN, SOUTH AFRICA (Feb. – Aug. 2001)**

*Courses taught and other activities undertaken:*

1. Science Education 111 (SE 111) – to Advanced Certificate of Education students.
2. Science Education 111 (HDE 111) – to Higher National Diploma in Education students.
3. Science Education 111 (BEd 111) – to Bachelor of Education students.
4. Resource person: INSET training of 75 Primary school teachers in the Kimberley Education District in the Northern Cape.
5. Academic Counselor for 8 M.Ed. Eritrean science education students.
6. Appointed as an External Examiner to examine 1 M.Ed. Physics education thesis.

**Sabbatical Leave:** February 20<sup>th</sup> 2012 –February 20<sup>th</sup> 2013: **Modibbo Adama University of Technology, Yola, Adamawa State, Nigeria.**

1. Whiles at the Department of Science Education, Modibbo Adama University of Technology, Yola, I taught the following courses:

| <b>Level</b> | <b>Courses</b>   |
|--------------|--|
| 200          | <b>SE 203 -Integrated Science II</b><br><b>SE 234 – Introductory Statistics &amp; Elementary Probability</b> |
| 300          | <b>SE 311 - Methods of Teaching General Science &amp; Physics/Chemistry</b><br><b>ED 358 –Micro Teaching</b> |
| 500          | <b>SE 597 –Project I</b><br><b>SE 598 –Project II</b>  |
| PGDE         | <b>ED 607 – Measurement &amp; Evaluation</b><br><b>ED 652 – Research Methods II</b>                          |

2. Member of Team to restructure **MEd/MTech** Courses for the Department of Science Education
3. Took active part in the **School of Technology and Science Education’s**

**Department of Technology Education Postgraduate Proposal/Seminar defense of  
MEd. and PhD students.**

4. Gave my best to the School of Technology and Science Education and particularly to the Department of Science Education in terms of teaching, research and other social responsibilities.

**Conferences, Seminars, Symposia, Workshops attended**

1. Jan. 30 – Feb. 10 1995: Educational Technology Workshop on the production and use of instructional materials. University College of Education, Winneba
2. March 15 – 18, 1995: Workshop on designing and writing distance education materials for the Post-Diploma B.Ed., IEDE, UCEW.
3. 23<sup>rd</sup> - 27<sup>th</sup> Nov. 1998: Attended 7<sup>th</sup> National Energy Symposium at the Saaskawa Centre, University of Cape Coast. Read a paper titled “**How to promote energy conservation in the rural areas of Ghana**”.
4. 25<sup>th</sup> - 31<sup>st</sup> July, 1999: Attended the 21<sup>st</sup> Biennial Conference of the Ghana Science Science Association at the University of Ghana, Legon. Read two papers:
  - i. “Designing a General Science Curriculum for the Public Understanding of Science”.
  - ii. “The use of continuous assessment by teachers: A comparative study of Continuous Assessment and Senior Secondary School Certificate Examination results of three schools in Accra”.
5. 19<sup>th</sup> - 22<sup>nd</sup> June, 2000: Attended AFCLIST COUNTRY IMPACT WORKSHOP at the University College of Education, Winneba.
6. 15<sup>th</sup> – 22<sup>nd</sup> March 2001: First Seminar of the Graduate Studies in Science, Mathematics and Technology Education (GRASSMATE) Programme, University of the Western Cape, Cape Town, South Africa.
7. 1<sup>st</sup> – 12<sup>th</sup> April 2002: Fourth Regional College on Modelling, Simulation and Optimization, Kwabenya-Accra, Ghana.
8. 27<sup>th</sup> – 28<sup>th</sup> August 2002: Stakeholders’ Workshop on Integrated Resource planning in the Energy Sector in Ghana – Strategic National energy Plan 2000 – 2020, Golden Tulip Hotel, Accra.
9. 20<sup>th</sup> -21<sup>st</sup> July 2005: Scientific and Technical Information System (SIST) Trainers-Training Workshop in the use of the SIST Tool, Institute for Scientific and Technological Information (INSTI), CSIR, Accra.
10. 10-12<sup>th</sup> April 2006: Scientific and Technical Information System (SIST) Trainers-Training Workshop in the use of the SIST Tool, Institute for Scientific and Technological Information (INSTI), CSIR, Accra.
11. 10 – 18<sup>th</sup> Dec. 2006: Commonwealth of Learning (COL)/Teacher Education in Sub-Saharan Africa (TESSA) Versioning Workshop, National Teachers’ Institute (NTI), Kaduna, Nigeria.

12. 24 -26<sup>th</sup> January 2007: **Programme Reform and Alignment for increasing Competencies of Teachers and for Improving Comprehension and Application in Learning science and mathematics (*PRACTICAL*)** Workshop on “Course Manuals Development & Formulating Portfolio Assignments”. Sasakawa Center, University of Cape Coast.
13. 19<sup>th</sup> -22<sup>nd</sup> February 2007: Commonwealth of Learning (COL)/TESSA West Africa Teacher Educator Conference. University of Education, Winneba/University of Cape Coast.
14. 21<sup>st</sup>-25<sup>th</sup> May 2007: ***PRACTICAL*** Workshop for Content Lecturers of University of Education, Winneba and University of Cape Coast and the Development of Postgraduate Courses. Sasakawa Center, University of Cape Coast. This workshop is in preparation for the visit to the Netherlands in June/July 2007.
15. June 10 –July 7, 2007: ***PRACTICAL*** Project Workshop on course Development and Analysis of course design requirements and generation of new content and ideas for courses for both B.Ed. and Postgraduate programmes for Ghanaian Science and mathematics Educators of the University of Education, Winneba and University of Cape Coast. Centre for international Cooperation, Vrije Universiteit Amsterdam, The Netherlands.
16. 5 -10<sup>th</sup> August 2007: 25<sup>th</sup> Biennial Conference of the Ghana Science Association Cocoa Research Institute of Ghana (CRIG), Akim Tafo and the Cocoa College at Bunso.
17. October 31- November 2 2007: 2007 National Energy Symposium Energy Sector Reforms: Removal of policy implementation barriers LA PALM ROYAL BEACH HOTEL, ACCRA. Presented a paper titled: Rural household electricity consumption – its implication to the economy of Ghana. Also chaired one of the Working Sessions.
18. May 7-9, 2008: ***PRACTICAL*** Project Workshop on “***Science and Mathematics and the Education Reforms: The Role of the Designated Teacher Training colleges (TTCs) and the Way forward.*** Elmina Beach Resort.
19. June 28 – July 12, 2008: ***PRACTICAL*** – Training Programme for the improvement of mathematics and Science Teacher Training and research in Ghana. University of Utrecht, Utrecht, The Netherlands.
20. February 16– 20, 2009: **Meeting of the West African Consortium for Teacher Education (WACTED)** NCCE, Abuja, Nigeria.
21. 29-31 October 2009: Second National Workshop on Science & Indigenous Knowledge Systems, University of the Western Cape, Cape Town, South Africa.
22. September 24, 2008 –December 18, 2010: Resource person (Integrated Science) – Development of Senior Secondary Education Project (DSSEP) In-Service Training of

Senior High Schools (SHS) and Technical Institutes Core Subject Teachers of English, Mathematics, Integrated Science and Social Studies. Ministry of Education Science Resource Centre, Cantonments, Accra.

23. (2015 / 16) T-TEL Challenge Fund to support Innovative approaches to Teacher Education (Ada & Mount Mary Colleges of Education).
24. November 1, 2016: Review meeting for the T-TEL Project Coordinating Team, UEW
25. August 11, 2017: Transforming Teacher Education and Learning in Ghana (T-TEL Ghana) *Evaluation of T-TEL Materials: TPD and TP*, Accra.
26. July 4, 2018: West Africa Built Environment Research (WABER) Conference Workshop for Research Supervisors (supervisors of Bachelors, Masters & PhD students); British Council, Accra.
27. August 22, 2018: Orientation for Deans, Directors and Heads of Department: Theme- Achieving Results through Effective Leadership. Manna Heights Hotel, Mankessim.
28. January 09, 2019: Workshop on Plagiarism. Lecture Hall 2, South Campus, University of Education, Winneba.
29. January 21, 2019: Workshop on Accreditation and Re-Accreditation of University Programmes. Lecture Hall 4, Faculty of Science Education, University of Education, Winneba.
30. March 11, 2019: Workshop on “Low Value and Minor Value Procurement Policy”. Council Chamber, North Campus, University of Education, Winneba.
31. May 2020: Chairman, University Farm Investigative Committee
32. January 17 -19, 2023: Inter University Conference for Doctoral Studies – Promoting Staff Development through Collaborative Research in Education. Jophus Anamoah-Mensah Conference Centre, University of Education, Winneba. South Campus Lecture Theatre 8, University of Education, Winneba.
33. July 12, 2023: Innovative Teaching Strategies to Address Students’ Misconceptions in Physics. Presented topic: ‘Differentiated Instruction in Teaching Physics’.
34. March 8-11, 2024: West African Senior School Certificate Examination National Party Workshop, Volta Serene Hotel, Ho. Facilitated as Subject Expert (Manufacturing Engineering).

## **Research & Publications**

1. K.D. Taale (1994): "Research and Development policy in renewable energy sector with emphasis on solar energy as Ghana's hope for the future". *Journal of Energy and Technology*, Vol. 6, 1994; pp. 141-145.
2. K.D. Taale *et al.* (1998): *ISC 510 - Measurement and Analysis*. (B.Ed. by Distant Education.) IEDE, UCEW
3. K.D. Taale (1999): "Analysis of the first five years' of Ghana's Basic Education Certificate Examination (BECE) results in General Science". *Journal of the Ghana Science Association*. Vol. 2 (2) 1999, pp.1-11.
4. K.D. Taale (1999): "What is the contribution of practical work to science education?" *Ghana Educational Media and Technology Association Journal*, (GEMTA), Vol. 3, 19-26.
5. K.D. Taale (2000): *ISC 431 – Electrical Energy and Power Distribution* (B.Ed. by Distant Education.) IEDE, UCEW. 287 pages
6. K.D. Taale *et al.* (2001): Interim Report – Project Proposal AF99057 # 88 Diagnosing some learning difficulties of pupils in science in primary schools in Ghana and developing appropriate interventionist strategies (An AFCLIST sponsored project and also the Project Director.).
7. K.D. Taale (2001) A study of Grade 7 Pupils' conceptions of Energy and Change in South Africa. (A research report presented to UNESCO as part of the UPAAE Fellowship Exchange programme at the University of the Western Cape)
8. K.D. Taale & Ernest Ngman-Wara (2003) *ISC 122-Methods and Assessment in Integrated Science* (Diploma in Basic Education by Distance). IEDE, UEW, 187 pages.
9. M.B. Ogunniyi and K.D. Taale (2004) Relative effects of a remedial instruction on grade seven learners' conceptions of the heat, magnetism and electricity. *African Journal of Research in Science, Mathematics and Technology Education*. Volume 8(1), pp.77-87.
10. Taale, K.D., Asabere-Ameyaw, A. and Oppong, E.K. (2005) *Integrated Science for the Basic Teacher II* (Diploma in Basic Education by Distance). IEDE, UEW.
11. Taale, K.D. (2005) Assessing Ghana's Energy Potentials in *Proceedings of International Solar Energy Society (ISES) 2005 Solar World Congress - Bringing Water to the World*. Orlando, Florida, August 6-12, 2005
12. Taale, K.D. (2005) The role small hydro can play in helping to reduce deforestation in Ghana in *Proceedings of International Solar Energy Society (ISES) 2005 Solar World Congress - Bringing Water to the World*. Orlando, Florida, August 6-12, 2005
13. Oddoye, E.O.K., Obeng-Ofori, Taale, K.D & Attopley, N.K. (2005) *SWL Agriculture for Junior Secondary Schools – Pupil's Book 1-3*. Accra: Sam-Woode Ltd. (Ministry of Education Adopted Books for Junior High Schools in Ghana)



14. Oddoye, E.O.K., Obeng-Ofori, Taale, K.D & Attopley, N.K. (2005) *SWL Agriculture for Junior Secondary Schools – Teacher’s Guide 1-3*. Accra: Sam-Woode, Ltd.  
(Ministry of Education Adopted Books for Junior High Schools in Ghana)
15. Yeboah, S.K., Taale, K.D. & Ngman-Wara, E. (2005) *SWL Science for Junior Secondary Schools – Pupil’s Book 1-3*. Accra: Sam-Woode Ltd.  
(Ministry of Education Adopted Books for Junior High Schools in Ghana)
16. Yeboah, S.K., Taale, K.D. & Ngman-Wara, E. (2005) *SWL Science for Junior Secondary Schools – Teacher’s Guide 1-3*. Accra: Sam-Woode Ltd.  
(Ministry of Education Adopted Books for Junior High Schools in Ghana)
17. Boateng-Ennimful (Rev.), E., Taale, K.D & Pratt, D. (2005) *Integrated Science for Primary Schools – Pupil’s Book 4-6*. Accra: Adwinsa Publications Ltd.  
(Ministry of Education Adopted Books for Upper Primary Schools in Ghana)
18. Boateng-Ennimful (Rev.), E., Taale, K.D & Pratt, D. (2005) *Integrated Science for Primary Schools – Teacher’s Guide 4-6*. Accra: Adwinsa Publications Ltd.  
(Ministry of Education Adopted Books for Upper Primary Schools in Ghana)
19. Taale, K.D. (2006) *Scientific and Technical Information System (SIST) Training Manual*, UEW.
20. Taale, K.D. (2007) *Rural household electricity consumption – its implication to the economy of Ghana*. A Conference paper presented at the 2007 National Energy Symposium Energy Sector Reforms: Removal of policy implementation barriers LA PALM ROYAL BEACH HOTEL, ACCRA.
21. Taale, K. D. & Ngman-Wara, E. (2008) *SWL Science for Junior High Schools – Pupil’s Book 1 – 3*. Accra: Sam-Wood Ltd.  
(Ministry of Education Adopted Books for Junior High Schools in Ghana)
22. Taale, K. D. & Ngman-Wara, E. (2008) *SWL Science for Junior High Schools – Teacher’s Guide 1 – 3*. Accra: Sam-Woode Ltd.  
(Ministry of Education Adopted Books for Junior High Schools in Ghana)
23. Taale, K.D. (2008) *Science Modules 1 – 3 [GHANA]* Versioned materials for Teacher Education in Sub Saharan Africa (TESSA) Open Educational Resources for Teacher Education in Africa. Materials available at <http://www.tessafrica.net>  
(These TESSA materials (including audio and other media) are modular in format. They focus on classroom practice in the key areas of literacy, numeracy, science, social studies and the arts and life skills).
24. Taale, K.D. (2010) Factors influencing students’ physical science enrolment decision at the University of Education, Winneba. *African Journal of Educational Studies in Mathematics and Sciences*, Vol. 8, 2010, pp. 63-80.
25. Taale, K.D. (2010) Ghanaian primary school pupils’ conceptual framework of energy. *Journal of Education and Practice*. ISSN 2222-1735 (Paper) ISSN 2222-288X (Online), Vol 1, No 4, 2010, [www.iiste.org](http://www.iiste.org).
26. Hanson, R., Taale, K.D & Antwi, V (2011). Investigating Senior High School Students’

Conceptions of Introductory Chemistry Concepts. *International Journal of Educational Administration* ISSN 0976-5883 Volume 3, Number 1, pp. 41-57. Research India Publications, <http://www.ripublication.com/ijea.htm>.

27. Taale, K.D. (2011) Parental and society influence on Physics students' enrolment decisions in the University of Education, Winneba, Ghana. *Journal of Education and Practice*. ISSN 2222-1735 (Paper) ISSN 2222-288X (Online), Vol. 2, No 4, 2011, [www.iiste.org](http://www.iiste.org).
28. Taale, K.D. (2011) Improving physics problem solving skills of students of Somanya Senior High Secondary Technical School in the Yilo Krobo District of Eastern Region of Ghana. *Journal of Education and Practice*. ISSN 2222-1735 (Paper) ISSN 2222-288X (Online), Vol. 2, No 6, 2011, [www.iiste.org](http://www.iiste.org).
29. Taale, K.D. (2011) *ISC 511 Energy*. (MED. by Distance). IEDE, UEW. (Units 1 -4).
30. Taale, K.D. (2011) *PSC 522 Principles of Science Teacher Education and Internship*. (MED. by Distance). IEDE, UEW. (Units 1 -4).
31. Taale, K.D., Ngman-Wara, E. & Tachie-Young, T. (2011) *PSC 501 Foundations of Science*. (MED. by Distance). IEDE, UEW. (Contributed Units 2 & 4).
32. Amedeker, M.K. & Taale, K.D. (2011) *PSC 504 Research Methods in Science Education*. (MED. by Distance). IEDE, UEW. (Contributed Units 3 & 4).
33. Taale, K.D., Hanson, R. & Antwi, V. (2011) Practical skills of Science Teacher-trainees in Science and Mathematics Colleges of Education in Ghana. *Studies in Curriculum, Volume 5, September 2011*, pp. 57-74.
34. Amedeker, M.K., Anderson, I.K., Taale, K.D. & Antwi, V. (2011) *SCB 501 A Physics 1 (University physics made simple)*. (MED. by Distance). IEDE, UEW, 310 pages. [Contributed Unit 3 – Geometrical & Physical Optics, pp. 151-273].
35. Oddoye, E.O.K., Taale, K.D., Ngman-Wara, E., Samlafo, V., & Obeng-Ofori, D. (2011) *SWL INTEGRATED SCIENCE for Senior High Schools, STUDENTS'S BOOK*. Sam-Woode Ltd., Accra, Ghana. 539 pp.
36. Akpanglo-Nartey, R.K., Asabere-Ameyaw, A., Sefa Dei, G.J. & Taale, K.D. (2012). Children's Indigenous ideas and the learning of conventional science (pp. 63-72). In Akwasi Asabere-Ameyaw, George J. Sefa Dei & Kolawole Raheem (Eds.) *Contemporary Issues in African Sciences and Science Education*. Sense Publications, Rotterdam/Boston/Taipei.
37. Eminah, K., Taale, K., & Kolawole, Raheem (2012). Science student teachers' attitude towards improvisation (pp. 73-80). In Akwasi Asabere-Ameyaw, George J. Sefa Dei & Kolawole Raheem (Eds.) *Contemporary Issues in African Sciences and Science Education*. Sense Publications, Rotterdam/Boston/Taipei.
38. Amedeker, M.K., Anderson, I.K., Taale, K.D. & Antwi, V. (2012) *SCB 501 B Physics 2 (University physics made simple)*. (MED. by Distance). IEDE, UEW, 210 pages. [Contributed Unit 2 – Atomic & Nuclear Physics, pp. 77-130]

39. Taale, K.D. & Antwi, V. (2012) Factors that appear to affect the effectiveness of science laboratory work at Senior High Schools in Ghana. *Linguist. Cult. Educ.* 1 (2012), No. 2, 282-298, ISSN 2050-7453. Available online at <http://scik.org>.
40. K.D. Taale (2012) Regular classroom assessment as a means of enhancing Teacher Trainees' understanding of concepts in electricity and magnetism. *African Journal of Educational Studies in Mathematics and Sciences* Vol. 10, 2012, pp. 111-126.
41. K.D. Taale (2013) Remediating some learning difficulties of L200 Science Education students of Modibbo Adama University of Technology in some physics concepts using multiple representations. *International Journal of Education and Practice*, 2013, 1(3):26-43. Available online at <http://www.pakinsight.com/journals/IJEP.htm>
42. K.D. Taale & Anderson, I.K. (2014) Ghanaian senior high school students' perceptions of energy. *Research on Humanities and Social Sciences* ISSN 2222-1719 (Paper) ISSN 2222-2863 (Online) Vol.4, No.4, 2014, pp. 93-102. Available online at <http://www.iiste.org/Journals/index.php/RHSS/article/view/11307>
43. K.D. Taale (2014) Gender and location influence on Ghanaian students' perceptions of energy and classroom learning. *International Journal of Education and Practice*, 2014, Vol. 2, No. 3, 51-66. Available online at <http://www.pakinsight.com/journals/IJEP.htm>.
44. K.D. Taale & Babagana A. Mustapha (2014) Effects of teacher-constructed electrical models on students' academic achievement in Basic electricity in Technical Colleges of Borno State, Nigeria. *International Journal of Innovative Social & Science Education Research*, 2(1):16-25, March 2014. Available online at [www.seahipub.org](http://www.seahipub.org) ISSN: 2360-8978.
45. Okoronka, A.U. & Taale, K.D. (2014). Analogies, problem-solving and concept mapping instructional strategies as determinants of Senior Secondary School students' achievement in wave concepts in Adamawa State, Nigeria. *International Journal of Humanities and Social Sciences (IJHSS)* ISSN(P): 2319-393X; ISSN(E): 2319-3948 Vol. 3, Issue 3, May 2014, 33-46 © IASET / [www.iaset.us](http://www.iaset.us)
46. Taale, K.D. (2017) *PHY 521 Electromagnetism, Atomic & Nuclear Physics* (MED. by Distance). IEDE, UEW (Units 1 -4).
47. Sedegah, S; Taale, K.D.; Arkoful, S. & Henewa, R.A. (2019). The Influence of Cooperative Learning Approach on Senior High School Students' Understanding of Ionic Bonding in Integrated Science: The Case at Adeiso Presby Senior High School. *International Journal of Innovative Social & Science Education Research* 7(4):112-122, Oct.-Dec., 2019 © SEAHIPUBLICATIONS, 2019 [www.seahipaj.org](http://www.seahipaj.org) ISSN: **2360-8978**
48. Kaburi, R.A., Taale, K.D. & Antwi, V. (2019). Using Hands-on activities to improve the conceptual understanding of Senior High School students in electrical circuits. *Journal of North American Research*. Volume 2, Issue 12, December 2019; DOI: NOR, Am, Aca. Res, 2019: 2(12):249-371; <https://doi.org/10.5281/zenodo.3593562>
49. Okoronka, A.U. & Taale, K.D. (2021). Book Chapter "Application of Cues, Prompts, Probes, Questions and Gestures (CPPQG) in Physics Teaching and Learning". *Modern Perspectives in Language, Literature and Education*. (<http://www.bookpi.org>)
50. In press: **Desmond Appiah, Victor Antwi, Michael Gyan, Isaac Kwesi Acquah, Fortune Addo-**

**Wuver, K.D. Taale**

Optical characterisation of polarised light beam under different aqueous concentrations. *The International Journal of Engineering and Applied Physics (IJEAP)*(2023) (<https://ijeap.org/ijeap/>)

***Proof-read and edited the following books:***

51. Yeboah, S.K. and Kwesi-Ahordjie, J. (2005) *SWL Integrated Science for primary Schools*. Books 4-6. Accra: Sam-Woode, Ltd.

**Membership of Professional and learned bodies**

1. University Teachers Association of Ghana (UTAG)
2. Ghana Science Association (GSA)
3. Ghana Association of Science Teachers (GAST)
4. Ghana Solar Energy Society (GHASES)
5. International Solar Energy Society (ISES)
6. Ghana Institute of Physics (M.Gh IP)
7. Energy Research Group, Ghana (ERG)

**Other relevant information (Public and community service)**

1. 13 – 25 April 1997: Conducted a Workshop on the teaching of primary mathematics and science SOS Village, Asiakwa
2. 5 – 15 Dec. 1999: Consultant, Workshop on the Training of District Teacher Support Teams (DTSTs) to consolidate knowledge and skills to promote good primary practices in Literacy, Numeracy and Problem-solving to improve quality teaching and learning in schools at Koforidua.
3. 13 – 24 November, 2000: Resource person (Science), Workshop on primary school methodology. (Sponsored by ACTION AID GHANA at UCEW).
4. 2002 - ..Served as Resource person, Chief Judge and Guest Speaker, Ajumako-Enyan-Essiam and Asikuma-Odoben-Brakwa Districts Science, Technology and Mathematics Education (STME) Clinic. (Sponsored by the Cultural Affairs Department of the US Embassy, Accra)
5. 1<sup>st</sup>-5<sup>th</sup> March 2006 – Member of Science Team to draft Concept Paper to be presented to Carnegie Corporation of New York for funding, Manet Paradise Beach Hotel, Ada-Foah
6. 27<sup>th</sup>-31<sup>st</sup> March 2006 – Member of Team to Review BED (Basic Education) Courses, Ghana Education Staff Development Institute, Ajumako
7. 2006 -: Member, UEW Programme Review Committee
8. 2006 -: Member, National World Year of Physics (WYP) 2005 Celebration Planning Committee (Ghana Branch)
9. 15<sup>th</sup> June 2006: Organized a “Scientific and Technical Information System (SIST) Presentation of the SIST Device and Training towards its use” Sensitization Workshop for 25 UEW Senior Members at the ICT Centre on the use of the SIST Tool in collaboration with INSTI (Institute for Scientific and Technological Information) of the CSIR, Accra. Was the main Resource person.
10. Member of the National Planning Committee, 2007 Energy Symposium.
11. 2006 -: Member - Academic Board of UEW

12. 2005 -: Member – Faculty of Science Education Board and Appointments and Promotion Committee.
13. Member – Administration Committee of UEW (2007)
14. 2007 -: Member, Ghana National Working Party for Senior High School Physics.
15. 2014 to date -: Reviewer for the following Journals:
16. (i) African Journal of Research in Mathematics, Science and Technology Education.  
(ii) International Journal of Innovative Social & Science Education Research,  
(iii) International Journal of Educational Policy Research and Review  
<http://www.journalissues.org/IJEPRR>  
(iv) The International Journal of Engineering and Applied Physics (IJEAP)  
(<https://ijeap.org/ijeap/>)

### **Research work in progress**

1. Diagnosing some learning difficulties of pupils in science in primary and secondary schools in Ghana and developing appropriate interventionist strategies.
2. Study of primary and secondary school pupils' conceptual development in science.
3. Science and Indigenous Knowledge Systems
4. Effective ways of teaching Physics to Senior High Schools and Tertiary students

### **Referees**

1. Prof. Yaw Ameyaw  
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2. Prof. Ruby Hansen  
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