



# Curriculum Vitae

Collins Owusu-Fordjour

Department of Integrated Science Education

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*Born on 29<sup>th</sup> August 1991.*

Ghanaian

**Areas of Expertise or Professional Skills:** Integrated Science Education and Biology

## **Professional Qualification(s):**

MPhil Science Education                      University of Education, Winneba      2019

BSc Integrated Science Education              University of Education, Winneba      2016

## **Professional Responsibilities:**

Teaching undergraduate students

Supervision of undergraduate students' long essay

Supervision of undergraduate students' pre-internship seminar

## **Education**

Phd. Science Education                      University of Education, Winneba      ongoing

MPhil Science Education                      University of Education, Winneba      18<sup>th</sup> April, 2019

BSc Integrated Science Edu.                      University of Education, Winneba      29<sup>th</sup> July 2016

## Career History

Position/Title	Name of Institution	Date
<b>Assistant Lecturer</b>	University of Education, Winneba	16 <sup>th</sup> March 2021- date
<b>Responsibilities:</b>	Teach undergraduate students Supervise undergraduate students' long essay Supervise and mentor students during on-campus teaching practice Invigilation of semester Examinations Mark students' scripts	
<b>Tutor</b>	College of Distance and E-Learning, U.E.W	Feb 2019 to date
<b>Responsibilities:</b>	Teach undergraduate science courses Supervise undergraduate students' long essay Invigilate during mid-semester and end of semester examinations	
<b>Teacher</b>	St. Mary's Boys Catholic S.H.S – Takoradi	16 <sup>th</sup> March 2020 – 16 <sup>th</sup> March 2021
<b>Responsibilities:</b>	Prepare lessons and teach Integrated Science to students Mark students' exercises and exams Supervise students during grounds work and at the dining hall	
<b>Teacher</b>	St. Paul Methodist Prep. School – Winneba	18 <sup>th</sup> May 2018 – 16 <sup>th</sup> March 2020
<b>Responsibilities:</b>	Prepare integrated science lessons and teach Junior High School pupils Give and mark students' exercises and exams Preparing students for quizzes Supervising students during grounds work and other extra curricula activities	
<b>Science Curriculum Specialist</b>	Omega Schools Franchise Ltd.	April 2017 - Sept. 2017
<b>Responsibilities:</b>	Review integrated science curriculum and prepare lessons for schools in Ghana and Liberia. Construct Integrated Science Test Items for Omega Schools in Ghana and Liberia.	

**National Service Person** University of Education, Winneba. 1<sup>st</sup> Sept 2016 – 31<sup>st</sup> Aug 2017

**Responsibilities:** Set-up lecture halls for lecturers to teach

Organise and supervise laboratory activities by undergraduate students

Invigilate quizzes and end of semester examinations

**Teacher (Intern)** Krobo Girls Presbyterian SHS – Odumasi Krobo Aug 2015 – Dec 2015

**Responsibilities:** Prepare lessons and teach Integrated Science to students

Mark students' exercises and exams

Supervise students during grounds work and at the dining hall

### **Publications, Research/Projects Conducted or Undertaken, Creative**

#### **Works/Productions Produced:**

a. Books

- Koomson, C.K., **Owusu-Fordjour, C.** Quaye, M.O. & Mensah, N. (2023). *Plant Physiology*. Otia Press. ISBN: 978-9988-3-5118-2
- Koomson, C.K., Yeboah, K.O., & **Owusu-Fordjour, C.** (2022). *Anatomy and Physiology of Mammals*. U.E.W. Press. ISBN: 978-9988-3-3877-0
- Koomson C.K. & **Owusu-Fordjour, C.** (2022). *Introduction to Genetics and Evolution*. Winneba: Zoe Publications. ISBN: 978-9988-3-2917-4
- Koomson, C.K., **Owusu-Fordjour, C.**, & Twumasi. S.A. (2022). *Scientific Approaches to Solving Agricultural Problems*. Winneba: CoDEL-UEW.
- Koomson, C.K., **Owusu-Fordjour, C.**, & Twumasi. S.A. (2022). *Preparing to Teach Science*. Winneba: CoDEL-UEW.
- Koomson, C.K., **Owusu-Fordjour, C.**, & Twumasi. S.A. (2022). *Biology Around Us*. Winneba: CoDEL-UEW.
- Koomson, C.K., **Owusu-Fordjour, C.**, & Twumasi. S.A. (2022). *Agricultural Resources and Technology*. Winneba: CoDEL-UEW.
- Koomson, C.K., **Owusu-Fordjour, C.**, & Twumasi. S.A. (2022). *Environmental Effect of Agriculture and Entrepreneurship*. Winneba: CoDEL-UEW.
- Koomson, C.K., **Owusu-Fordjour, C.**, & Twumasi. S.A. (2022). *Historical Development Tools and Materials in Agriculture*. Winneba: CoDEL-UEW.
- Koomson, C.K., **Owusu-Fordjour, C.**, & Twumasi. S.A. (2022). *Agricultural Policies and Association*. Winneba: CoDEL-UEW.
- Sakina, A., Koomson, C.K. & **Owusu-Fordjour, C.** (2021). *Environmental Biology*. Winneba: CoDEL-UEW.

b. Peer-Reviewed Journal Articles

- **Owusu-Fordjour, C.**, Koomson, C.K., Annan, S.T. & Asante, R. O. (2023). Influence of Peer Tutoring on Undergraduate Students Anxiety in Integrated Science: A Case Study in the University of Education, Winneba. *Science Education International*, 34(2), 159-163
- Ibrahim, I., Eminah, J.K., **Owusu-Fordjour, C.**, Afram, S.O. & Baalongbuoro, V. (2023). The effect of teacher motivation and instructional methodologies on student outcomes in integrated science in the Upper East region, Ghana. *International Journal for Innovation Education and Research*. 11(2): 12 – 22.
- Koomson, C., Darku, A. & **Owusu-Fordjour, C.** (2022). Susceptibility of *Dermestes Maculatus* Degeer (Coleoptera: Dermestidae) Larvae Infesting Smoked African Catfish (*Clarias Gariepinus*) to *Alchornea Cordifolia* (Schum. & Thonn.) Leaf Powder. *International Journal of Applied Biology*, 6: 152-160.
- Patterson, V., Koomson, C.K., Darku, A. & **Owusu-Fordjour, C.** (2022). Impact of In-Service Training Programme on the TPACK of Science Teachers: A Case of New Juaben-North Municipality in the Eastern Region of Ghana. *Journal of Education*, 7: 58-64
- **Owusu-Fordjour, C.**, Koomson, C.K., Twumasi, S.A., Baidoo, M.A., Lumor, P.D., Mensah, N., & Konadu, E. (2022). Pedagogical Content Knowledge of Integrated Science Teachers and its Impact on their Instructional Practice. *American Journal of Educational Research*, 10(7): 439 – 443. DOI:10.12691/education-10-7-2
- **Owusu-Fordjour, C.**, Koomson, C.K., Essuman, Twumasi, S. A. & Awortwe, L. (2022). Assessment of Personnel and Infrastructure Readiness for the Implementation of the new Basic School Science Curriculum in the Northern Region of Ghana. *International Journal of Academic Research and Reflection*, 10(2): 38 – 49.
- Afari-Baidoo, Michael., Ofori Gyamerah, Eric., Yeboah, Kwaku Opoku., Koomson, Charles Kwesi. & **Owusu-Fordjour, Collins.** (2022). Use of Internet Health Information Resources and Information Seeking Behaviour among Undergraduate Student of University of Education, Winneba. *Journal of Health & Medical Informatics*, 13(1): 1-5. <http://doi: 10.37421/jhmi.2022.13.400>
- Koomson, C.K., **Owusu-Fordjour, C.** & Darku, A. (2022). Larvicidal and pupicidal potential of *Alchornea cordifolia* (Schum. & thonn.) leaf extract against the malaria vector *Anopheles gambiae* (Diptera: culicidae). *International Journal of Mosquito Research*, 9(1): 56-60. <https://doi.org/10.22271/23487941.2022.v9.i1a.581>
- Annan, S.T., Frimpong, B., **Owusu-Fordjour, C.**, & Boasu, B. Y. (2022). Assessing Localized Contamination Hazard and Groundwater Quality Challenges in Water-Stressed Peri-Urban Accra, Ghana. *Journal of Geoscience and Environment Protection*, 10, 13-28. <https://doi.org/10.4236/gep.2022.101002>
- Twumasi, S.A., **Owusu-Fordjour, C.**, Koomson, C.K., Agyeman, C., Addae, R., & Anim, D.O. (2021). Curriculum Knowledge of Science Teachers and Its Effects On

Academic Performance of Pupils. *International Journal of Academic Research and Reflection*, 9(3): 64 -77.

- **Owusu-Fordjour, C.**, Azure, A.J. & Koomson, C.K. (2021). Integrated Science Teachers' Self-Efficacy Beliefs and It's Impact On Their Instructional Practice. *European Journal of Open Education and E-learning Studies*. 6(2): 98 – 108.
- **Owusu-Fordjour, C.** (2021). Attitude of Teachers and its Impact on their Instructional Practice. *European Journal of Education Studies*, 8(8): 81 – 95.
- Koomson, C.K., **Owusu-Fordjour, C.**, Afari-Baidoo, M. & Biritwum, C.A. (2020). Analysis of the ABO and RH (D) Blood Groups Among Third Year Integrated Science Education Students of the University of Education, Winneba. *Journal of Biology and Life Science*, 11(2), 107 – 116.
- **Owusu-Fordjour, C.**, Koomson, C.K. & Hanson, D. (2020). The impact of covid-19 on learning. The perspective of the Ghanaian student. *European Journal of Education Studies*, 7(3), 88 – 103.
- Koomson C. K., Agyei-Bieni, J., Acquaye D. O. & **Owusu-Fordjour, C.** (2020). Health Seeking Behaviours of Science Students and their Perception of Health Care Services in the University of Education, Winneba. *International Journal of Science and Research*, 9(4), 235 – 240.
- Koomson C.K, & **Owusu-Fordjour C.** (2018). Misconception of Senior High School Science Students on Evaporation and Water Cycle. *European Journal of Research and Reflection in Educational Sciences*, 6 (5), 13 - 28
- Koomson C.K, Oppong E.K, **Owusu-Fordjour C.** & Afari-Baidoo M. (2018). Entomocidal properties of Christmas bush, *Alchornea cordifolia* (Schum & Thorn) bark powder against maize weevil, *Sitophilus zeamais motschulsky* (Coleoptera: Curculionidae) in storage. *International Journal of Entomology Research*, 3 (3), 1 – 6.

c. Referred Conferences Proceedings/Articles

- Centre for Leadership & Diversity International Conference. University of Toronto. October 14 – 15, 2022. (Virtual)  
*Topic: Assessing the Gender Differences in the Performance of Pre-service Science Teachers.*
- 6th International Multidisciplinary Conference for Postgraduate Students. University of Education Winneba – Ghana, September 2022.
- 4th International Multidisciplinary Conference for Postgraduate Students. University of Education Winneba – Ghana, July 2019.  
*Topic: Integrated Science teachers' attitude and their efficacy beliefs on their instructional practice*
- 3rd International Multidisciplinary Conference for Postgraduate Students. University of Education Winneba – Ghana, August 2018.  
*Topic: Using cooperative learning approach to improve the performance of students in Integrated Science*

### **Professional Development:**

- Improve your Research Experience with Refworks. ProQuest (online training).  
March 2022
- The Art of Academic Honesty: Plagiarism unpacked. ProQuest (online training).  
March 2022

### **Seminars and Workshops:**

- Understanding and Publishing Open Access in Science, Technology and Innovation. Taylor and Francis Group. May, 25<sup>th</sup> 2023.
- Reference Management and Citation Training Seminar. Mendeley. March 16<sup>th</sup> 2023.
- A 2-day Education Webinar in Finland from Early Years to University. January 28 – 29, 2023.
- Grant and Proposal Writing Seminar. DRID – UEW. June 2021
- Internship Supervisors Workshop-Student Internship Programme 2021/22 (Institute for Teacher Education and Continuing Professional Development –ITECPD, January 2022.
- Capacity Building Workshop on New Educational Curriculum for selected CODEL tutors. Gloriako Hotel, Winneba. February 2022
- Workshop on Second Semester Courses and UEW LMS for Selected Basic Education Tutors of IDEL. Wadoma Royale Hotel-Kumasi- Ghana, April 2021.
- Workshop on UEW LMS for Selected IDEL tutors. Wadoma Royale Hotel – Kumasi – Ghana, October 2020.
- Workshop on the New Curriculum for Basic School Teachers. Institute for Teacher Education and Continuing Professional Development – UEW, April 2019.
- Seminar on Thesis and Proposal Writing. GRASAG – UEW, IERIS, and School of Graduate Studies – UEW, April 2018.
- Student internship programme pre-education seminar. Centre for Teacher Development and Research, University of Education, Winneba, March 2015.
- Workshop on Leadership for Service. Holy Spirit Catholic Church, University of Education, Winneba, March 2015.
- Workshop on General and Financial Management for Students Leaders. Office of the Dean of Students Affairs, University of Education, Winneba, May 2014.

- Young Professionals’ Transformational Leadership Conference. Young Professionals and Youth Coalition, October 2012.
- Time Management Workshop. Holy Spirit Catholic Church, University of Education, Winneba, September 2012.
- Workshop on General and Financial Management for Students Leaders. Office of the Dean of Students Affairs, University of Education, Winneba, May 2014

### **Conference(s)**

- The Inter-University Conference for Doctoral Studies (IUCDS). University of Education, Winneba. January 17 – 19, 2023
- Centre for Leadership & Diversity International Conference. University of Toronto. October 14 – 15, 2022. (Virtual) (Presented)
- Regional Conference on Strengthening Research Ethics. University of Nairobi, Kenya. 24<sup>th</sup> to 26<sup>th</sup> May 2022 (Virtual).
- 4th International Multidisciplinary Conference for Postgraduate Students. University of Education Winneba – Ghana, July 2019. (Presented)
- 3rd International Multidisciplinary Conference for Postgraduate Students. University of Education Winneba – Ghana, August 2018. (Presented)

### **Curriculum Development:**

#### INS 114: Morphology and Diversity of Living Things

This course seeks to equip students with the skills and knowledge to identify and classify living things into their various taxa using morphological features.

#### INS 233: Basic Soil Science

This course is designed to introduce students to properties of soil. The course will further introduce students to the physical, chemical and biological properties of soils; the origin, classification, and distribution of soils and their influence on people and food production; the management and conservation of soils; and the environmental impact of soil use.

#### INS 351: Principles of Genetics and Evolution

This course will introduce you to the basic concepts of genetics and evolution of life. The relationship between the genes, chromosomes and the nucleus of the cell will be discussed. The course further introduces you to the causes of variation in living organisms and how offspring inherit basic traits from their parents. The bases for evolution and the theories will be discussed in this course as well.

#### INS 125: Anatomy and Morphology of Plants

This course introduces students to the various types of plant cells and their functions. It further introduces students to the various plant tissues and their modifications as well plant structure and plant modification. Again, the course takes students through the life cycle of plants.

#### INS 244: Anatomy and Physiology of Mammals

This course is designed to introduce students to some systems and their functions in mammals. It also looks at various life process and the organs that coordinate such processes in the mammal

#### INS 362: Introduction to Plant Physiology

This course is designed to introduce students to the mechanism of plant life. It focuses itself on transport in plants as well as plant nutrition with emphasis on C3, C4 and CAM plants. Respiration, General Plant Metabolism, Dynamics and control of plant growth and development is also discussed.

#### **Student Development:**

- Patron: Association of Integrated Science Education Students
- Academic Counsellor, Integrated Science Education. Level 100 students

#### **Membership of Professional Association(s)**

- University Students Association of Ghana March 2021 to date
- Ghana Science Association 2022 to date



## Community Service:

- Patron: Association of Integrated Science Education Students
- Moodle writer: College of Distance and e-Learning – UEW
- Speaker: Orientation for first year Catholic students
- Research counsellor: Graduate Student Association of Ghana (GRASAG) – UEW
- Participant: Chemistry Festival: Department of Integrated Science Education
- Facilitator: Research Seminar by the Department of Integrated Science Education – UEW
- Contributor: Master of Philosophy in Integrated Science Education
- Speaker: Orientation of appointed executives of UEW SRC – 2022 Administrative year
- Member: Disaster Risk Assessment in the context of climate change in Effutu Municipality

## Referees:

Dr. Charles Kwesi Koomson  
Senior Lecturer, Department of Integrated Science Education  
University of Education, Winneba  
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