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RESEARCH

Interests	Mathematics Education
Areas	Education · Computer Science Applications · Developmental and Educational Psychology · Experimental and Cognitive Psychology · Applied Mathematics · Political Science and International Relations

RESEARCH SUMMARY

34	242	7	5	1.12	14%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 34 publications listed below, 2013–2026. Field-weighted impact is the mean over the 22 works scored for it; 1.00 is the world average for works of the same field, type and year. 3 of the 22 papers scored for it are among the world's most cited tenth for their field, type and year.

PUBLICATIONS

Journal articles 30

1. Yeboah Adjei, Sam Arkoful, **Peter Akayuure**, Solomon Boachie (2026). Exploring Pre-Service Teachers Perceived Challenges and Learning Needs in Studying General Chemistry. *OALib*. https://doi.org/10.4236/oalib.1115477
2. John Takyi-Bondzie, Samuel Asiedu-Addo, **Peter Akayuure**, Gloria Armah (2026). Mathematics Teachers' Perceptions and Classroom Implementation of STEM–Computational Thinking Following Professional Development in Ghana. *Asian Journal of Education and Social Studies*. https://doi.org/10.9734/ajess/2026/v52i103354
3. Victus Kumazah, Ethel Ansaah Addae, **Peter Akayuure** (2026). STEM Perceptions and Barriers: The Influence of Gender and School Type among Junior High School Learners in the Central Region of Ghana. *GHANA JOURNAL OF EDUCATION AND TEACHING*. https://doi.org/10.64712/ghajet.v14i3.796
4. **Peter Akayuure**, Christopher Owu-Annan (2025). Beyond Test Anxiety: A Comprehensive Analysis of Academic Emotions and its Impact on Undergraduate Students' Mathematics Engagement. *African Journal of Educational Studies in Mathematics and Sciences*. https://doi.org/10.4314/ajesms.v21i1.3
5. Edmund Anamboi Aduko, **Peter Akayuure** (2025). Discourse trajectories in mathematics classrooms: An empirical study of preservice teachers in Ghana. *Asian Journal for Mathematics Education*. https://doi.org/10.1177/27527263251322538
6. Justice Yawson Mensah, **Peter Akayuure**, Stephen Ebo Sam, Stephen Eduah (2025). Impact of Cognitive and Non-Cognitive Factors on Mathematics Achievement among Pre-service Teachers in Ghanaian Colleges of Education. *Journal of Practical Studies in Education*. https://doi.org/10.46809/jpse.v6i6.145
7. Stephen Junior Appiah, Emmanuel Kojo Amoah, Emmanuel Antwi Adjei, **Peter Akayuure** (2025). Senior high school students thinking levels in permutation and combination using solo taxonomy. *Asian Journal of Contemporary Education*. https://doi.org/10.55493/5052.v9i2.5511
8. Christopher Owu-Annan, **Peter Akayuure**, Richard Asumadu Oppong (2024). Attitudes and Metacognitive Awareness as Predictors of Undergraduates' Algebra Scores. *African Journal of Educational Studies in Mathematics and Sciences*. https://doi.org/10.4314/ajesms.v20i1.7

9. Francis Atanga Akayuure, **Peter Akayuure** (2024). Examining fresh students' achievement motivation and self-efficacy towards learning high school mathematics. *Contemporary Mathematics and Science Education*. https://doi.org/10.30935/conmaths/14691

10. Richardson Addai-Mununkum, Samuel Asare Amoah, Emmanuel Makabu Jagri Tamanja, Patricia Mawusi Amos, Edmond Akwasi Agyeman, Christian Addai-Poku, **Peter Akayuure**, Hinneh Kusi (2024). "It Makes Us Feel More Professional!" Stakeholders' Perception of the Ghana Teacher Licensure Examination. *Teacher Education and Curriculum Studies*. https://doi.org/10.11648/j.tecs.20240901.13

11. **Peter Akayuure** (2022). Delivery: The UEW Experience. *Digital Transformation of Education and Learning-Past, Present and Future: IFIP TC 3 Open Conference on Computers in Education, OCCE 2021, Tampere, Finland, August 17–20, 2021, Proceedings*. https://books.google.com/books?hl=en&lr=&id=A_hjEAAAQBAJ&oi=fnd&pg=PA179&dq=info:1BK0pH507rsJ:scholar.google.com&ots=fTtcConm1Z&sig=x1Q07aPXaSxKktWcWq3e3mnA3yY

12. **Peter Akayuure** (2022). Examining Senior High School Girls' Thinking Levels in Solving Problems on Circle Theorems. *International Journal of Secondary Education*. http://www.intjsedu.org/article/10.11648.j.ijsedu.20221004.11

13. **P Akayuure**, RA Oppong, DA Addo, DO Yeboah (2022). Geometric thinking behaviours of undergraduates on-entry and at-exit of online geometry course. *Science Journal of Education*. https://scholar.google.com/scholar?cluster=7365109701488031638&hl=en&oi=scholarr

14. **Peter Akayuure** (2022). School Based Assessment Framework: Senior High School Mathematics Teachers' Use of Assessment Modes. *International Journal of Secondary Education*. https://doi.org/10.11648/j.ijsedu.20221004.12

15. **Peter Akayuure** (2021). Classroom Assessment Literacy Levels of Mathematics Teachers in Ghanaian Senior High Schools. *Contemporary Mathematics and Science Education*. https://doi.org/10.30935/conmaths/11286

16. Clement Ayarebilla Ali, **Peter Akayuure** (2021). Didactics has evolved to digital age didactics. *digiTAL 2021*. https://www.researchgate.net/profile/Andre-Calitz-2/publication/356187806_The_Impact_of_COVID-19_on_Students_Completing_a_Blockchain_Course/links/61d5bf3ae669ee0f5c880135/The-Impact-of-COVID-19-on-Students-Completing-a-Blockchain-Course.pdf#page=78

17. **Peter Akayuure** (2021). Preservice Teachers' Content Knowledge and Learning Obstacles in Shape and Space. *Asian Research Journal of Mathematics*. https://doi.org/10.9734/arjom/2021/v17i730318

18. **Peter Akayuure**, Samuel Ebenezer Armah, Robert Benjamin Armah (2020). A Comparative Study of Male and Female Distance Learners' Mathematics Achievement. *Contemporary Mathematics and Science Education*. https://doi.org/10.30935/conmaths/9288

19. Nana Akosua Owusu-Ansah, Jones Apawu, **Peter Akayuure** (2018). A study on the algebraic working processes of senior high school students in Ghana. *European Journal of Science and Mathematics Education*. https://doi.org/10.30935/scimath/9523

20. Michael J. Nabie, **Peter Akayuure**, Ussif A. Ibrahim-Bariham, Seidu Sofo (2018). TRIGONOMETRIC CONCEPTS: PRE-SERVICE TEACHERS' PERCEPTIONS AND KNOWLEDGE. *Journal on Mathematics Education*. https://doi.org/10.22342/jme.9.2.5261.169-182

21. Clement Ayarebilla Ali, **Peter Akayuure** (2016). Exploring Postgraduate Students' Research Knowledge and Skills in Normality Tests and Verifications. *US-China Education Review A*. https://doi.org/10.17265/2161-623x/2016.01.005

22. **P Akayuure**, Clement Ayarebilla Ali (2016). Incorporating Indigenous" Bukre" Game into Mathematics Lessons: A Teaching Experiment. *Online Submission*. https://eric.ed.gov/?id=ED618692

23. Clement Ayarebilla Ali, **Peter Akayuure** (2016). Infusing Competencies and Skills of Vocational Instructors: Innovations to Boost Science and Technology for National Development. *American Scientific Research Journal for Engineering, Technology, and Sciences (Global Society of Scientific Research and Researchers)*.

24. Patricia Ananga, **Peter Akayuure** (2016). Integrating interactive multimedia into mathematics course modules for distance education. *African Journal of Educational Studies in Mathematics and Sciences*.

25. **Peter Akayuure** (2016). Investigating the Effect of Origami Instruction on Preservice Teachers' Spatial Ability and Geometric Knowledge for Teaching. *International Journal of Education in Mathematics, Science and Technology*. https://eric.ed.gov/?id=EJ1102197
26. CA Ali, **P Akayuure** (2016). Student-Teachers' Knowledge and Skills in Contemporary Quantitative Methods in Action Research Reporting. *IOSR Journal of Research and Method in Education (IOSR-JRME)*. https://scholar.google.com/scholar?cluster=11671732924404802 94&hl=en&oi=scholarr
27. **Peter Akayuure**, Jones Apawu (2015). Examining Mathematical Task and Pedagogical Usability of Web Contents Authored by Prospective Mathematics Teachers. *International Journal of Research in Education and Science*. https://doi.org/10.21890/ijres.69649
28. **Peter Akayuure** (2015). Information and Communication Technology use and ICT Competency in Education: The Case of Sandwich Students. *International Journal of Information and Communication Technology Research*. https://www.academia.edu/download/39176238/vol5no6_2.pdf
29. **Peter Akayuure** (2013). Ghanaian prospective mathematics teachers' perceived self-efficacy towards web pedagogical content knowledge. *International Journal of Liberal Arts and Social Science*. https://www.researchgate.net/profile/Seidu-Sofo/publication/282612456_Ghanaian_Prospective_Mathematics_Teachers'_Perceived_Self-_Efficacy_towards_Web_Pedagogical_Content_Knowledge/links/561408ff08aec622440ff137/Ghanaian-Prospective-Mathematics-Teachers-Perceived-Self-Efficacy-towards-Web-Pedagogical-Content-Knowledge.pdf
30. **Peter Akayuure** (2013). Integrating problem solving and investigations in Mathematics: Ghanaian teachers' assessment practices. *International Journal of Humanities and Social Science*. https://scholar.google.com/scholar?cluster=3431103095318194231&hl=en&oi=scholarr

Book chapters 2

1. Stephen Osei Akyiaw, Esther Yeboah Danso-Wiredu, **Peter Y. Akayuure**, Christiana Hammond, Bernard B. B. Bingab, Philip Siaw Kissi, Samuel Kweku Hayford (2025). A Community-Led Approach to Solid Waste Source Separation Through Community Engagements and Communication in Accra. *Advances in environmental engineering and green technologies book series*. https://doi.org/10.4018/979-8-3693-5898-6.ch014
2. **Peter Akayuure**, Esther Yeboah Danso-Wiredu, Christiana Hammond, Bernard B. B. Bingab, Stephen Osei Akyiaw, Philip Siaw Kissi, Samuel Kweku Hayford (2024). Residents' Perceptions and Intentions On Solid Waste Source Separation and Composting Initiatives in Accra. *Advances in environmental engineering and green technologies book series*. https://doi.org/10.4018/979-8-3693-8527-2.ch019

Conference papers 1

1. **Peter Akayuure** (2022). Use of Vclass in Mathematics Education Delivery: The UEW Experience. *IFIP advances in information and communication technology*. https://doi.org/10.1007/978-3-030-97986-7_15

Theses 1

1. **Peter Akayuure** (2017). The language of deception transitivity analysis of scam email messages. *University of Education Winneba*. https://ir.uew.edu.gh/handle/123456789/1547