

Prof Forster D Ntow

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RESEARCH

Interests Mathematics identity formation · Teacher identity formation · Teachers' take-up from professional

Areas Education · Applied Mathematics · Developmental and Educational Psychology · Experimental and Cognitive Psychology · Statistics and Probability · Safety Research

RESEARCH SUMMARY

36	350	11	11	2.34	26%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 36 publications listed below, 2009–2026. Field-weighted impact is the mean over the 19 works scored for it; 1.00 is the world average for works of the same field, type and year. 5 of the 19 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

SENIOR LECTURER 2010–present
MATHEMATICS & ICT EDUCATION, University of Cape Coast Faculty of Educational Foundations, Cape Coast, Ghana

PUBLICATIONS

Journal articles 29

1. Isaac Benning, George Adom, Douglas Darko Agyei, Japhet Kwasi Osiakwan, Helena Naa Korkor Tetteh, Forster D. Ntow (2026). A multivariate and structural modelling analysis of teacher readiness and adoption of the TM1 laptop computer for classroom use. *Discover Education*. <https://doi.org/10.1007/s44217-026-01698-1>
2. Japhet Kwasi Osiakwan, Forster D. Ntow, Ernest Kofi Davis (2026). Influence of preservice teacher education on mathematics teaching efficiency of beginning teachers. *Teaching and Teacher Education*. <https://doi.org/10.1016/j.tate.2026.105644>
3. Forster D. Ntow, Christian Kwame Kpotosu (2025). Teachers are Digitally Equipped, but for Teaching? Exploring Mathematics Teachers' Perceived Levels of Digital Competencies for Teaching with Technology. *Interdisciplinary Educational Technology*. <https://doi.org/10.71176/interedtech/17574>
4. Bright Asante Britwum, Forster D. Ntow, Joseph Andam Smith (2024). Influence of Teaching Approaches on Senior High School Students' Mathematical Mindset. *SAGE Open*. <https://doi.org/10.1177/21582440241237060>
5. Forster D. Ntow, George Adom, Solomon Essel, Samuel Kenney (2024). Students' Understanding of the Equal Sign when Solving Arithmetic Tasks. *African Journal of Educational Studies in Mathematics and Sciences*. <https://doi.org/10.4314/ajesms.v20i2.5>
6. Samuel Kenney, Forster D. Ntow (2024). Unveiling the Errors Learners Make When Solving Word Problems Involving Algebraic Task. *SAGE Open*. <https://doi.org/10.1177/21582440241299245>
7. Richard Kyere Asomah, Douglas Darko Agyei, Forster D. Ntow, Isaac Benning (2023). Hypothetical Approach to the Teaching of Trigonometric Concepts Using Cooperative Learning. *Education Research*

International. <https://doi.org/10.1155/2023/2051776>

8. Richard Kyere Asomah, Douglas Darko Agyei, Forster D. Ntow (2022). Developing in-service mathematics teachers' pedagogical content knowledge and skills to teach trigonometry: Using cooperative teaching and learning approach. *Contemporary Mathematics and Science Education*. <https://doi.org/10.30935/conmaths/12540>
9. Ernest Kofi Davis, Forster D. Ntow, Christopher Beccles (2022). Factors Influencing Ghanaian Public Junior High School Students' Performance in English Language, Mathematics and Science and its Implications on the National Policy on Progression. *SAGE Open*. <https://doi.org/10.1177/21582440221123912>
10. Dennis Offei Kwakye, Foster Ntow, Christopher Saaha Bornaa, Churcher Kwasi Amanyi, Lloyd Asiedu Owuba, Stephen Atepor (2022). Mathematics Teacher Noticing: A Case of Students' Cognition of a Course Content. *Journal of Education Society and Behavioural Science*. <https://doi.org/10.9734/jesbs/2022/v35i1030462>
11. Forster Ntow (2022). Uncovering Basic Four Learners' Ideas about the Concept of Equal-Sharing in Fractions. *African Journal of Educational Studies in Mathematics and Sciences*. <https://doi.org/10.4314/ajesms.v18i1.2>
12. Yunus Hissan and Forster D. Ntow (2021). An Investigation into the Effect of Concept-Based Instruction on Senior High School Students' Geometric Thinking and Achievement in Circle Theorem. *International Journal of Research and Innovation in Social Science (IJRISS)*.
13. Forster D Ntow, MP Okai (2021). Teaching mathematics in an inclusive basic school: A case study of the experiences of non-special education teachers. *Ghana Journal of Education: Issues and Practice (GJE)*. <https://journal.ucc.edu.gh/index.php/gje/article/download/1099/544>
14. Forster Danso Ntow, Yunus Hissan (2021). The impact of concept-based instruction on senior high school students' achievement in circle theorems. *African Journal of Educational Studies in Mathematics and Sciences*. <https://doi.org/10.4314/ajesms.v17i1.8>
15. Isaac Buabeng, Forster Danso Ntow, Charles Deodat Otami (2020). Teacher Education in Ghana: Policies and Practices. *Journal of Curriculum and Teaching*. <https://doi.org/10.5430/jct.v9n1p86>
16. Forster D. Ntow, Jill Adler (2019). Identity resources and mathematics teaching identity: an exploratory study. *ZDM*. <https://doi.org/10.1007/s11858-019-01025-z>
17. EM Wilmot, FD Ntow (2018). What is happening in Ghanaian Junior High School mathematics classrooms: A look at students' perception. *The Oguaa Educator*. https://www.academia.edu/download/84224095/Wilmot_Asomah_Ntow_2018_WhatishappeninginGhanaianJuniorHighSchool.pdf
18. EM Wilmot, Forster Danso Ntow (2018). What is happening in Ghanaian Junior High School mathematics classrooms?: A look at students' perception: What is happening in Ghanaian Junior High School mathematics *The Oguaa Educator*. <https://journal.ucc.edu.gh/index.php/oguaaeducator/article/download/504/313>
19. Forster D Ntow (2017). How confidence relates to mathematics achievement: A new framework. *Mathematics Education and Life at Times of Crisis, Proceedings of the Ninth International Mathematics Education and Society Conference*. <https://www.academia.edu/download/56412373/d03ae31eb4330c04a01f858f3d877423ee27.pdf#page=103>
20. Emmanuel Adu-tutu Bofah, Forster D. Ntow (2017). Internal/external frame of reference: exploring the paradoxical relations between mathematics and self-concept across 29 countries. *Ghana Journal of Education Issues and Practice (GJE)*. <https://doi.org/10.47963/gje.v4i.495>
21. Emmanuel Adu-tutu Bofah, Forster D. Ntow (2017). Perceived social support from parents and teachers' influence on students' mathematics-related self-beliefs. *African Journal of Educational Studies in Mathematics and Sciences*.
22. Forster D. Ntow, Lesa M. Covington Clarkson, Sousada Chidhachack, Elizabeth A. Crotty (2017). Should I Stay or Should I Go? Persistence in Postsecondary Mathematics Coursework. *THE MATHEMATICS EDUCATOR*. <https://doi.org/10.63301/tme.v26i2.2032>
23. Forster D Ntow (2015). Preserving pelicans with models that make sense. *Mathematics Teaching in the*

Middle School. <https://pubs.nctm.org/view/journals/mtms/20/6/article-p358.pdf>

24. Isaac Buabeng, Kofi Acheaw Owusu, Forster Danso Ntow (2014). TIMSS 2011 Science Assessment Results: A Review of Ghana's Performance. *Journal of Curriculum and Teaching*. <https://doi.org/10.5430/jct.v3n2p1>
25. F Ntow (2013). The status of engineering in the current K-12 state science standards. *Scientific paper to be presented at the*. <https://scholar.google.com/scholar?cluster=5837977651223503743&hl=en&oi=scholar>
26. Isaac Buabeng & Forster D Ntow (2010). A Comparison study of students' reasons/views for choosing/not choosing Physics between undergraduate female non-Physics and female Physics students at the University of Cape Coast. *International Journal of Research in Education*. <https://scholar.google.com/scholar?cluster=3551226955575956312&hl=en&oi=scholar>
27. Forster D Ntow (2010). CAREER: Implementing K-12 engineering standards through STEM integration. *EEC*. <https://scholar.google.com/scholar?cluster=13068082656638854301&hl=en&oi=scholar>
28. FD Ntow (2009). Pre-service teachers' content knowledge for teaching basic school mathematics. *Mathematics Connection*. https://www.researchgate.net/profile/Damian-Mereku/publication/272548926_Comparative_analysis_of_performance_of_eighth_graders_from_six_African_countries/links/56b474cb08ae5deb26598d46/Comparative-analysis-of-performance-of-eighth-graders-from-six-African-countries.pdf#page=34
29. Forster Danso Ntow (2009). Senior Secondary School Students' perception of their core mathematics classroom environment and attitude towards core mathematics. *Unpublished master's thesis, University of Cape Coast, Cape Coast*. <https://ir.ucc.edu.gh/handle/123456789/1261>. <https://ir.ucc.edu.gh/server/api/core/bitstreams/5ea76e77-cfa9-43f0-8a6d-48615aedfd97/content>

Book chapters 2

1. Forster D Ntow (2025). Exploring Ghanaian Computing Teachers' AI Pedagogical Content Knowledge (PCK) in Junior High Schools. *Proceedings of the ACM Global Computing Education Conference 2025-Volume 1*. <https://doi.org/10.1145/3736181.3747124>
2. Forster D Ntow (2014). Falling through the cracks: Undergraduate students' mathematics learning experience. *New Media, Knowledge Practices and Multiliteracies: HKAECT 2014 International Conference*. https://doi.org/10.1007/978-981-287-209-8_11

Conference papers 3

1. Francesca Morselli, Einat Heyd-Metzuyanim, Narumon Changsri, Forster Ntow, Shengying Xie (2024). Affect, Beliefs, and Identity of Mathematics Teachers. *Proceedings of the 14th International Congress on Mathematical Education*. https://doi.org/10.1142/9789811287152_0058
2. Forster D Ntow (2013). A framework for implementing quality K-12 engineering education. *2013 ASEE Annual Conference & Exposition*. <https://peer.asee.org/a-framework-for-implementing-quality-k-12-engineering-education>
3. Forster D Ntow (2013). The status of engineering in the current K-12 state science standards (Research to practice). *2013 ASEE Annual Conference & Exposition*. <https://peer.asee.org/the-status-of-engineering-in-the-current-k-12-state-science-standards-research-to-practice>

Reports 1

1. I Buabeng, FD Ntow (2010). Elements of SPSS: A step by step instruction to data analysis using SPSS. *Cape Coast: Hampton Press*. <https://scholar.google.com/scholar?cluster=17288993007906329527&hl=en&oi=scholar>

Theses 1

1. Forster Danso Ntow (2015). The Influence of an Out-Of-School Learning Program on High School Students' Mathematics Identity Formation. *University of Minnesota*. <https://search.proquest.com/openview/ad6582dfd5a6d0da474bd536ea0d6782/1?pq-origsite=gscholar&cbl=18750>