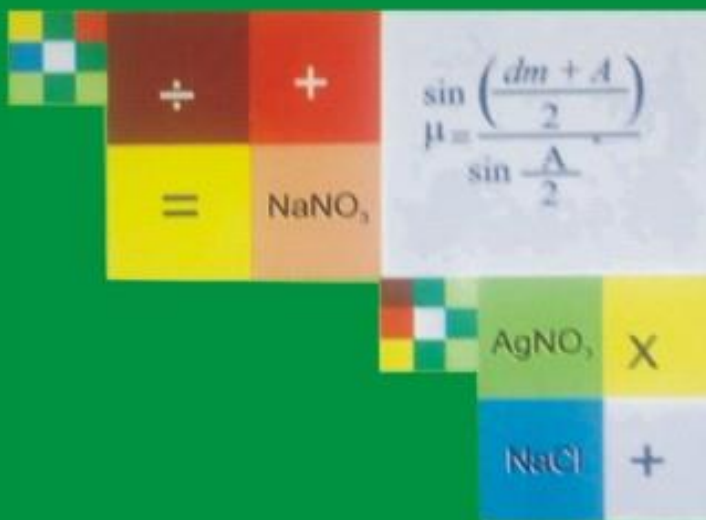


AFRICAN JOURNAL OF SCIENCE TECHNOLOGY AND MATHEMATICS EDUCATION (AJSTME)



Volume 9, Issue 5 - August, 2023. ISSN: 2251-0141 (Print)

ISSN: 2971-6233 (Online)



**JOURNAL OF THE DEPARTMENT OF SCIENCE EDUCATION
UNIVERSITY OF NIGERIA, NSUKKA**

OUR WEBSITE: <https://www.ajstme.com.ng>

AFRICAN JOURNAL OF SCIENCE, TECHNOLOGY AND MATHEMATICS EDUCATION (AJSTME)

Volume 9, Issue 5 - August, 2023

ISSN: 2251-0141 (Print)

ISSN: 2971-6233 (Online)

Published by the
Department of Science Education
University of Nigeria, Nsukka

The Editorial Board

Editor-in-Chief

Prof. L. N. Nworgu

Department of Science Education,
University of Nigeria, Nsukka

E-mail: loretta.nworgu@unn.edu.ng

Editor

Dr Christian Sunday Ugwuanyi

Department of Science Education,
University of Nigeria, Nsukka

E-mail: christian.ugwuanyi@unn.edu.ng

Associate Editors

- Dr. J. J. Agah, Department of Science Education, University of Nigeria, Nsukka
- Dr. B. C. E. Oguguo, Department of Science Education, University of Nigeria, Nsukka
- Dr. C. C. Ugwuanyi, Department of Science Education, University of Nigeria, Nsukka
- Dr. E. I. Orji, Department of Science Education, University of Nigeria, Nsukka
- Dr. F. E. Ikeh, Department of Science Education, University of Nigeria, Nsukka

Consulting Editors

- Prof. B. G. Nworgu, Department of Science Education, University of Nigeria, Nsukka
- Prof. U. M. Nzewi, Department of Science Education, University of Nigeria, Nsukka
- Prof. D. N. Ezech, Department of Science Education, University of Nigeria, Nsukka
- Prof. Nkadi Onyegegbu, Department of Science Education, University of Nigeria, Nsukka
- Prof. Chinwe Rose Nwagbo, Department of Science Education, University of Nigeria, Nsukka
- Prof. S. Mari, Department of Science Education, Ahmadu Bello University, Zaria
- Prof. A. M. Olagunju, Institute of Education, University of Ibadan
- Prof. Z.C. Njoku, Department of Science Education, University of Nigeria, Nsukka
- Prof. C. E. Ochonogor, Department of Science Education, Cape Peninsula University of Technology, Mowbray Campus, Cape Town, South Africa
- Prof. G. O. M. Onwu, University of Pretoria, South Africa
- Prof. J. C. Adigwe, Department of Science Education, University of Nigeria, Nsukka
- Prof. F.O. Ezeudu, Department of Science Education, University of Nigeria, Nsukka

Editorial Assistants

- Mr. Cliff Ikenna Okebanama, Department of Science Education, University of Nigeria, Nsukka
- Mr. Ukala, Geoffrey, Department of Science Education, University of Nigeria, Nsukka

Editorial

African Journal of Science, Technology and Mathematics Education (AJSME) is an official publication (now online) of the Department of Science Education, University of Nigeria, Nsukka. AJSTME is a peer reviewed publication aimed at advancing knowledge and professionalism in research in education. As a scholarly journal, it focuses in innovation in knowledge of Science, Technology and Mathematics (STM), Curriculum, Evaluation, Policy and Pedagogy.

The Editor-in-chief of this journal is sincerely thankful to the editorial team and to all those who contributed in one way or the other in making AJSTME what it is today and especially to our numerous subscribers.

In This Issue

- ❖ Effects of Problem-Based Learning on Students' Academic Algebra Performance in Uyo Local Government Area, Akwa Ibom State, Nigeria - **Ayoade, A. Sunday, James, G. Donatus & Ado, I. Bennet**.....201-207
- ❖ Effect of Discovery Method on Performance of Upper Basic II Students in Some Selected Basic Science Concepts in Giwa Education-Zone, Kaduna State, Nigeria - **Adamu, Abdullahi, Prof. I. A Usman & Abdullahi, Aliyu**208-212
- ❖ Effect of Practical Chemistry Teaching Strategies on Students Interest in Senior Secondary Schools in Kogi State - **Tsobaza M. K.**213-218
- ❖ Technical Know-How Required by the Students of Colleges of Education in Grasscutter (Thryonomys Swinderianus) Production for Wealth Creation in Benue State, Nigeria - **Agyeno, A. Daniel, Agbulu, O. Nichodemus & Wever, D. Gbenger.**219-225
- ❖ Ethical Issues in Computer as an Instrument of Technology Growth - **Onoja E. Oche. Suleiman M. Nasir, Adegboye, Y. Kazeem**226-233
- ❖ A Comparative Evaluation of Ethical Considerations in Data Mining Across Healthcare, Education, and Government Sectors: Promoting Responsible and Equitable Practices - **Jane A. Ukaigwe**.....234-242
- ❖ Assessing Human Resources Management and Academic Performance in Secondary Schools in Osun State Nigeria - **Ramota A. Rasaq, Eyitayo R. I. Afolabi & Ajisegiri, Ruth. O**.....243-249
- ❖ Investigation of the Level of Problems of Dyscalculia in Secondary Schools in Keffi Education Zone, Nasarawa State, Nigeria - **Sule S. Sardauna.**250-255
- ❖ Undergraduate Student's Perception on the use of E-Books in Supporting their Learning - **Mohammed M. Keni & B. Yushau**256-260
- ❖ Academic Engagement as a predictor of Mathematics Achievement Among Senior Secondary School Students in Ogun State - **Asanre, A. Ayoola**261-266
- ❖ The Perception and Usage of Educational E-Portfolio Among Fine and Applied Arts Undergraduates in Ondo State, Nigeria - **Ayelaagbe, 'Sina Opeoluwa**.....267-274
- ❖ Roles of Advocacy and Community Mobilization on Utilization of Sexual and Reproductive Health Services at Garba Buzu Community, Maiduguri, Borno State - **Salisu Mohammed Ali, Nelson Okoh Okoh, Emmanuel Eche Olofu, Onoja Paul Onoja & Hadi Usman**.....275-279

- ❖ Academic Resilience as Predictor of Secondary School Students' Attitude to and Performance in Physics in Enugu State, Nigeria - **Ebele C. Okigbo & Obinna C. Anosike...280-284**
- ❖ Junior Secondary School Basic Science Examination As Predictor of Senior School Certificate Examination, Physics, Chemistry and Biology In Rimi Educational Zone, Katsina State, Nigeria - **Abdulahakeem R. Bello, Garba S. Wangara & Habibu, Kamilu.....285-289**
- ❖ Effect of Four Modes Application Technique on Academic Performance and Retention Among Senior Secondary Chemistry Students, Katsina State, Nigeria - **Mustapha Sani & Aminu Salisu.....290-296**
- ❖ Self-Concept and Study Habit as Predictors of Academic Performance among Senior Secondary Chemistry Students in Katsina State, Nigeria - **Ibrahim A. Ibrahim.....297-301**
- ❖ Effect of Think-Pair Share on Geometric Knowledge of Primary School Pupils in Mathematics - **Obilor W. Enyinnaya, Ogbonna C. Chinyere & Uzuegbu S. Ogbonna.....302-309**
- ❖ Effects of Mind and Concept Mapping Techniques on Interest and Performance Among Senior Secondary Geography Students in Katsina State, Nigeria - **Muhammad N. Ibrahim & Aminu Salisu.....310-316**
- ❖ Relationship Between Chatbots and AI-Powered Gamification on Chemistry Students' Motivation - **Inwang V. Nkereuwem; Nja C. Obi & Sunday Oyovwikoghene.....317-322**
- ❖ Transforming Education: Inclusive Strategies for Encouraging Girls' Child in STEM Education in Nigeria - **Gbigbadua, A. Dare.....323-329**
- ❖ Effect of Physics Education Technology (PHET) Virtual Laboratory Experiment Simulation on Students' Academic Performance in Practical Physics in Ogoja Education Zone - **Liwhuliwhue A. Udie, Ofoegbu O. Theresa & Asogwa U. David.....330-336**
- ❖ Effect of Collaborative Learning Method on Academic Achievement of Secondary School Biology Students in Abia State - **Pius, Samuel & Anidu, I. Chibuzor.....337-343**
- ❖ Skill Acquisition and Values for Quality Physics Education: An Imperative for Sustainable National Development - **Fasanya A. Gabriel.....344-350**
- ❖ Awareness and Utilization of Google Classroom Among Undergraduate Students of Ondo State Universities - **Oripinye, B. Smart and Daramola F. Olutunu.351-357**

- 
- ❖ Metacognition and Self-Efficacy Belief as Determinants of Students Achievement in Biology in Isuikwuato Local Government Area of Abia State - **Odo I. Collens, Eluwa I. O. & Asumugha O. Happiness.....358-365**
 - ❖ Rising Insecurity and its Implications on Food Security in Niger North Senatorial District, Niger State, Nigeria – **Kabiru Idris, Ibrahim F. J. , Turaki, M. A. & Zainab, A. A.....366-370**
 - ❖ Challenges and Prospects of Implementation of Senior Secondary School Chemistry Curriculum in Nigeria - **Shaibu Abimaje Etimane.....371-378**
 - ❖ Professional Development of Science, Technology and Mathematics Education (Stme) Teachers in Nigeria and the Use of Computer Assisted Instruction (CAI) for Teaching Mathematics - **Item A. Effiong & Uwase U. Esuong.....379-385**
 - ❖ Implementing Digital Learning Technologies in Mathematics Education in Tertiary Institutions: Challenges and Prospects - **Nwoke, B. Ihechukwu, Uzoma, P. Ozioma & Okororie, Chigozie.....386-391**
 - ❖ Impact of Hybrid Learning Mode on Students' Achievement in Mathematics in Secondary Schools in Owerri Municipal Council - **Nwoke B. Ihechukwu, Uzoma P. Ozioma & Nwaneri O. Meshack.....392-399**
 - ❖ Promoting Interaction Effect of Instructional Model and Gender on Students' Achievement, Interest and Retention in Mathematics - **Odo Innocent O....400-406**