



**MATHEMATICAL ASSOCIATION OF NIGERIA
(M.A.N)**

abacus

THE JOURNAL OF THE
MATHEMATICAL ASSOCIATION OF NIGERIA

**VOLUME 47, NUMBER 2
MATHEMATICS EDUCATION SERIES
JULY, 2022**

NR-ISSN 0001 3099

Editor-in-Chief:
Professor Muhammad Lawan Kaurangini, FICA

Kano University of Science and Technology, Wudil, Nigeria

National Executive Officers (2021-2023)

1. Prof. K. O. Usman	President
2. Prof. M. A. Yusha'u	Vice President
3. Alhaji Jimoh Taylor	National Secretary
4. Prof. B. Y. Isah	Asst. Nat. Secretary
5. Mrs. Okodugha Brigitta Eno	Treasurer
6. T. A. Muhammad	Financial Secretary
7. Dr. Sadiq Abubakar	Publicity Secretary
8. Dr. Aliyu Taiwo	Business Manager
9. Prof. Muhammad L. Kaurangini	Editor-in-Chief
10. Dr. Olayemi O. Oshin	Deputy Editor-in-Chief
11. Prof. Mamman Musa	Immediate Past President
12. Dr. A. J. Alkali	Immediate Past National Secretary
13. Mr. Bankole J	Ex-Officio I
14. Dr. Chika C. Ugwuanyi	Ex-Officio II
15. Dr. Abimbola N. G. A	S. A. to President

Abacus:

Submission of the paper

Authors are requested to visit www.man-nigeria.org.ng to submit manuscripts in Microsoft word and make payment accordingly.

Preparation of the manuscript

General: The manuscripts should be in English and typed with single column and single line spacing on single side of A4 paper. The first page of an article should contain;

- (1) a title of paper which well reflects the contents of the paper (Arial, 12pt),
- (2) all the name(s) and affiliations(s) of authors(s) (Arial, 12pt),
- (3) an abstract of 100-250 words (Times New Roman, 11 pt),
- (4) 3-5 keywords following the abstract, and
- (5) footnote (personal title and email address of the corresponding author). The paper should be concluded by proper conclusions which reflect the findings in the paper. The normal length of the paper should be between 10 to 15 journal pages.

Tables and figures: Tables and figures should be consecutively numbered and have short titles. They should be referred to in the text as following examples (e.g., Fig. 1(a), Figs. 1 and 2, Figs. 1(a)-(d) / Table 1, Tables 1-2, etc). Tables should have borders (1/2pt plane line) with the captions right before the table. Figures should be properly located in the text as an editable image file (.jpg) with captions on the lower cell.

Units and Mathematical Expressions: It is desirable that units of measurements and abbreviations should follow the System International (SI) except where the other unit system is more suitable. The numbers identifying the displayed mathematical expression should be placed in the parentheses and referred in the text as following examples (e.g., Eq. (1), Eqs. (1)-(2)). Mathematical expressions must be inserted as an object (set as Microsoft Equations 3.0) for Microsoft Word 2007 and later versions. Image-copied text or equations are not acceptable unless they are editable. The raised and lowered fonts cannot be used for superscription and subscription.

References : A list of references which reflect the current edition of APA format, to locate after conclusion of the paper.

Review

All the submitted papers will undergo a peer-review process, and those papers positively recommended by at least two expert reviewers will be finally accepted for publication in the Abacus Journals or after any required modifications are made and a payment of **₦15,000.00** as publication fee. The normal length of the paper should be between 8 to 12 pages. Any extra page will attract additional charges at the rate of **₦500.00** per page.

Copyright

Submission of an article to Abacus Journal implies that it presents the original and unpublished work, and not under consideration for publication elsewhere. On acceptance of the submitted manuscript, it is implied that the copyright thereof is transferred to the Abacus. The Transfer of Copyright Agreement may also be submitted.

Editorial Board

Professor Muhammad Lawan Kaurangini, FICA

Editor-in-Chief,

Department of Mathematics,

Kano University of Science and Technology, Wudil, Nigeria

1. Professor K.O. Usman, Provost, Federal College of Education, (Special), Oyo, Nigeria
2. Professor M. A. Yusha'u, Department of Science and Vocational Education, Usmanu Dafodiyo University, Sokoto
3. Professor M. O. Ibrahim Department of Mathematics, University of Ilorin, Nigeria
4. Professor B. Sani, Department of Mathematics, Ahmadu Bello University, Zaria
5. Professor B. K. Jha, Department of Mathematics, Ahmadu Bello University, Zaria
6. Professor B. Ali, Department of Mathematics, Bayero University, Kano
7. Professor E. Oghre, Department of Mathematics, University of Benin, Nigeria.
8. Professor Mueide Promise, DG National Mathematical Centre, Abuja. Nigeria
9. Professor U.N.V. Agwagah, Department of Science Education, University of Nigeria, Nsukka
10. Professor B.I. Olajuwon, Department of Mathematics, Federal University of Agriculture, Abeokuta.
11. Professor S. I. Binds Department of Science and Technology Education, University of Jos, Nigeria

Associate Editors (2021-2023)

1. **Professor (Mrs.) M. F. Salman**
Department of Science Education,
University of Ilorin, Ilorin, Nigeria
2. **Professor E. T. Jolayemi**
Department of Statistics
University of Ilorin, Ilorin, Nigeria
3. **Professor Herbert Wills**
Department of Mathematics Education,
Florida State University, Tallahassee,
Florida, U.S.A.
4. **Professor O.S. Adegboye**
Department of Statistics,
LAUTECH, Ogbomosho, Nigeria.
5. **Professor A. Gumel**
Department of Mathematics,
Arizona State University Arizona, USA.
6. **Professor B. A. Oluwade**
Department of Mathematical Sciences,
Kogi State University, Anyigba, Nigeria
7. **Professor M. R. Odekunle,**
Department of Mathematics
Modibbo Adama University of
Technology, Yola.
8. **Professor Y. Korau**
Department of Science Education,
Ahmadu Bello University, Zaria.
9. **Professor J. A. Adepoju**
Department of Mathematics
University of Lagos, Lagos.
10. **Professor G. O. S. Ekhaguere**
Department of Mathematics
University of Ibadan, Ibadan
11. **Professor M. A. Ibiejugba**
Department of Mathematical Sciences
Kogi State University, Anyigba.
12. **Professor A. U. Afuwape**
Department of Mathematics
Obafemi Awolowo University Ile-Ife,
Nigeria.
13. **Professor Mamman Musa**
Department of Science Education
Ahmadu Bello University Zaria.
14. **Dr. Olayemi O. Oshin,**
Department of Mathematics Education,
Federal College of Education (special),
Oyo.
15. **Professor Ibrahim Galadima**
Department of Science Education
Usman Dan-Fodio University Sokoto
16. **Professor S. A. Abbas**
Department of Science Education
Bayero University, Kano

TABLE OF CONTENTS

1.	Level Of Implementation Of Ncce Minimum Standard On Admission Requirements For Mathematics Education Programme In South West Geo-Political Zone <i>U. N. V. Agwagah¹, N. L. Ekwue², P. Umukoro³</i>	1
2.	Effects Of Polya And Bransford-Stein Models On Students' Performance In Trigonometry, Among Senior Secondary School Students In Kano State, Nigeria. <i>Saleh Ibrahim, Maruta, C, Bolaji, M. Musa, & M. O. Ibrahim</i>	7
3.	Students' Perception Of The Influence Of Social Media On Academic Performance In Mathematics In Federal College Of Education Kontagora - Niger State <i>Umaru S Momozoku, Abdulmalik O Audu And Olorunsola O Niyi</i>	15
4.	Fostering The Teaching And Learning Of Mathematics In Junior Secondary Schools Through Ethno-Mathematics In Abia State Nigeria <i>Nnenna K. Uka Sussan Ijeoma Ezeh</i>	28
5.	Employability Skills Needed In The 21st Century Secondary School Mathematics Delivery For Job Creation <i>¹Anakpua, Blessing C., ²chiakwelu Amaka Benedine & ³emefo Chinyere N</i>	41
6.	Effect Of Constructivist Based Teaching Strategy On Junior Secondary School Students' Academic Performance In Mathematics In Ogun State <i>AMINU, Lateef. O & AKINMEJI Oluwaseyi Oluwatoyin</i>	58
7.	Heighten Teaching And Learning Of Mathematics Through Peer Tutoring <i>OSHIN Olayemi Oyenike</i>	67
8.	Students' Perception Of Measures For Enhancing Creativity In Mathematics For Effective Learning During Pandemic <i>Golly Sammy Gwandum & Bitrus Guwam</i>	79
9.	Enhancing Senior Secondary Students' Cognitive Performance In The Mathematics Concept Through Problem Solving Approach <i>Badru, Ademola K.</i>	87
10.	Challenges of Teaching Mathematics: A Perspective of Teachers on Training under Teacher Upgrade Programme, in Kano State, Nigeria <i>Muhammad Umar Sumaila</i>	98
11.	Secondary School Teachers' Motivation, Attitude, And Competence As Determinants Of Students' Academic Performance In Mathematics In Lagelu Local Government Area, Oyo State <i>OLASESAN, Olayinka Olayioye and LAWAL, Christianah Adenike</i>	106

12. Mathematics Laboratory: A Tool For Management Of Pandemics
IMr. Sunday D. Dung , Luka Joshua & Atah, B. G. 115
13. Impact Of Scaffolding Strategy On Students' Achievement In And Attitude Toward Algebra At Senior Secondary Schools
Iroko, Ganiyu Adisa and Olaoye, Adetunji Abiola 126
14. Effects Of Lesson Study And Think-Pair-Share Instructional Strategies On Students' Academic Performance In Circle Geometry
Oluwanife Segun, FALEBITA , Olubunmi Kayode, AYANWOYE and Olajumoke O. SALAMI 140
15. Empowering Learners in a Digital World through Innovative Teaching Methods in Mathematics.
Sussan ijeoma Ezeh, Dr. Nnenna Kalu Uka & Eneze, B.N 157
16. Impact Of Learning Mathematics Using Cartoon
Lawani Abisola. O. 167