

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

# abacus

# THE JOURNAL OF THE MATHEMATICAL ASSOCIATION OF NIGERIA

VOLUME 47, NUMBER I MATHEMATICS EDUCATION SERIES APRIL, 2022

# NR-ISSN 0001 3099

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

Kano University of Science and Technology, Wudil, Nigeria

M.A.N. ABACUS

# 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 **N15,000.00** 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 **N500.00** 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

# M.A.N. ABACUS

# Associate Editors (2021-2023)

- 1. Professor (Mrs.) M. F. Salman Department of Science Education, University of llorin, llorin, Nigeria
- 2. Professor E. T. Jolayemi Department of Statistics University of llorin, llorin, Nigeria
- **3. Professor Herbert Wills** Department of Mathematics Education, Florida State University, Tallahassee, Florida, U.S.A.
- Professor O.S. Adegboye Department of Statistics, LAUTECH, Ogbomoso, Nigeria.
- 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 lle-lfe, 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.	Effects Of Youtube Videos Instructional Strategy In Enhancing Students' Achievement In Mathematics By Gender And Birth Order <i>Frederick-Jonah, Toinpere Mercy, Moses, John Billy and Benneth, Ebiotukibena Edwin</i>	1
2.	Effect Of Activity, Student, Experiment And Improvisation Strategy On Mathematics Performance Among Primary Five Pupils In Sabon-gari Local Government Area Of Kaduna State, Nigeria <i>Iliyasu Adamu<sup>1</sup></i> , Yahuza Muhammed <sup>2</sup> and Shehu Yau <sup>3</sup>	14
3.	Parental Demographic Variables As Factors Influencing Pupils' Performance In Mathematics Selected Primary Schools In Zaria Local Government: Implication For School Counselling Salaudeen, Taofeeq Sola and Azeez, Luqman Adetunji	In 25
4.	Investigating The Effects Of Audiovisual Stimuli On Learning Outcome Of Basic School Pupils In Mathematics In Oyo State, Nigeria <i>K. A. SABITU, G. R. OLOSUNDE and T. A. AJAO</i>	34
5.	Impact Of Cooperative Learning Strategy On Performance And Retention In Geometry Among Junior Secondary School Students In Sokoto State, Nigeria <sup>1</sup> Aminu ISAH and <sup>2</sup> Bashirat Kikelomo Hamza	40
6.	Gender, Test Anxiety and Academic Performance in Mathematics Among SS3 Students in Calabar Education Zone, Cross River State, Nigeria <i>Esuong, UwaseUwase and Udo, Ofonime Friday</i>	52
7.	The Effect Of Inductive Learning Strategy On Students' Academic Achievment In Mathematics <sup>1</sup> Shafi, A, <sup>2</sup> Odupe T.A.A, <sup>3</sup> Salami, I.A, <sup>4</sup> Olabiyi, M.O, <sup>5</sup> Opeisa, Z.O	61
8.	Competencies Possessed By Mathematics Teachers In Handling Mathematics Laboratory In Public Secondary Schools In Imo State <i>Kevin C. Anaeche</i>	69
9.	Improvisation As A Tool For Enhancing Students' Achievement In Mathematics. Abimbola NurudeenGbolahanAdeshina <sup>1</sup> , Bello Asma'u <sup>2</sup> and Joshua Jacob <sup>3</sup>	86
10.	Generating And Sustaining Interest Of Students In Mathematics In Secondary School <i>Ojo S. G.</i>	99
11.	Correlation Of Students' Performance In Mathematics And Chemistry Among Senior Secondary School Students In Oyo East Local Government Area, Oyo State AYENI Adeniyi Abimbola, ADEJARE Akeem, OLADIPUPO Damilola, ADERINKOLA David A., ADEOTI Oluwatimileyin O., and AJAO Love	116