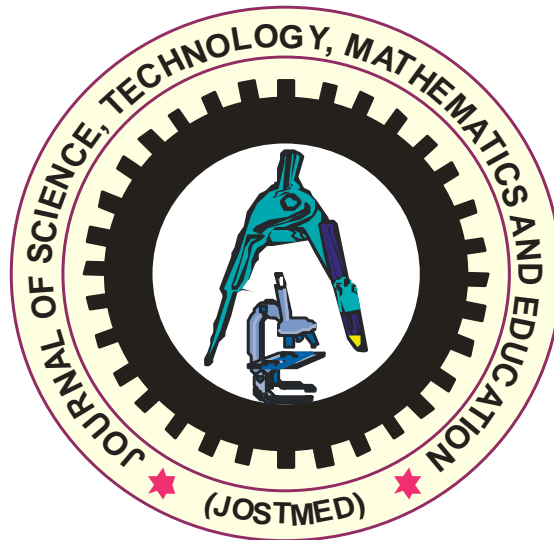


JOURNAL OF SCIENCE, TECHNOLOGY, MATHEMATICS AND EDUCATION (JOSTMED)



ISSN: 0748 – 4710

VOLUME 12(1), MARCH, 2016

WELCOME TO JOSTMED

Welcome to the Journal of Science, Technology, Mathematics and Education (JOSTMED). The JOSTMED is a scholarly based journal published thrice in a year by the Department of Science Education, School of Science and Science Education, Federal University of Technology, Minna, Nigeria, since September 1998. The scope of the Journal includes the research, development, and practice in all areas of Science, Technology, Mathematics and Education.

INSTRUCTIONS TO CONTRIBUTORS

1. General Guidelines

(i) **Types of Manuscripts:** The Editorial Board of the Journal of Science, Technology, Mathematics and Education accepts only scholarly and original articles that meet its aim and scope. Contributions must be original, therefore, authors is/are to guarantee that their article is original and not currently being considered for publication elsewhere.

(ii) **Language:** The JOSTMED is published in English Language.

(iii) **Length:** Usually full-length article, survey or report should be between 3,000 - 5,000 words (12 – 15 pages).

(iv) **Abstract and Keywords:** Each article should be summarized in about 150 -200 words, serving as a brief description of the content of the article. In addition, following the abstract, supply 4 - 5 keywords/phrases that characterize the content of the paper and which can be used for indexing purposes.

(v) **Manuscript:** Manuscripts, including the abstract and references, should be typed double-spaced on A4 paper set-up using Times New Roman, 12 font size.

(vi) **Review:** Each submission will be subjected to blind peer-review by at least two experts in the fields of the articles. Before the publication of accepted article, corresponding authors will receive a PDF version of their manuscript for final proofing. It should, however, be emphasized that changes in content (new or additional results, corrected values, changes in article title, etc) are not permitted without the approval of the Managing Editor.

2. Copyright

Only original papers will be accepted and processed. Paper accepted will be subjected to viper anti-plagiarize detector software. In addition, no compensation will be given in respect of published papers. However, authors reserve the right to use their own materials for purely educational and research purposes.

3. Format of Submitted Manuscripts

All manuscripts, written in good English, should be submitted electronically as an e-mail attachment (in Microsoft Word format not scanned copy) to the journal e-mail: jostmed@futminna.edu.ng, jostmedscience@yahoo.com or managing editor's e-mail: gambarii@yahoo.com, gambari@futminna.edu.ng.

In a rear occasion, when submitting manuscript in a paper version three copies should be submitted in double line spacing with wide margins, and not more than 12 pages with illustrations inserted. Extra page will attract additional amount of N1,000.00/\$7.00 per page. Each article submitted must be accompanied with an assessment fee of three thousand naira (N3,000) only in cash or bank draft in favour of the Managing Editor (JOSTMED). Submission of manuscript is accepted throughout the year.

The beginning of the manuscript must bear the title of the paper and the full names of authors and their affiliations for correspondence (including e-mail and telephone number). Where there are two or more authors include the addresses for correspondence (e-mail and postal addresses) for the contact author.

Once the article is accepted for publication, the final version should be submitted online. Where that is not possible, the manuscript must be provided, accompanied by a Recordable CD of the same version labelled with: author name(s); titles of article and file name. The author must ensure that the final submission is complete, grammatically correct and without spelling or typographical errors. In preparing the disk, please use Microsoft Word. The sum of Fifteen Thousand (N15,000) naira only (£50.00 or \$100 US Dollar) should be paid to journal account. The online version of the published articles are available at www.futminna.edu.ng and can be accessed through the Internet free of charge.

4. Organization

The background and purpose of the manuscript should be given first, followed by details of methods, materials, procedures and equipment used (where applicable). Findings, discussion, conclusions and recommendations should follow in that order. Appendices are not encouraged, but may be countenanced if considered necessary for the manuscript content to be understood. Specifically, author is/are advised to consult the current APA Manual for the details they may need.

5. Figures and Tables

Figures, charts and diagrams should be kept to a minimum, they must be numbered consecutively with roman numerals and a brief title. When submitting electronically, figures should be prepared separately, numbered consecutively and submitted in one of JPEG File interchange (jpg), CompuServe GIF (gif), and PC Paintbrush (pcx). Images should not exceed width of 450 pixels.

6. References

The author should ensure that the references given are complete. References to personal letters, papers presented at meetings and other unpublished material may be included. Where such materials may help in the evaluation of the paper, copies should be made available to the Managing - Editor. Papers that are part of a series should include a citation of the previous papers, and explanatory materials may be appended to the manuscript to avoid footnotes. Citation of an author's work in the text should follow the author / date method of citation; the surname of the author (s) and year of publication should appear in text. Generally, the format for citations in the Manuscript for references is that of the latest edition of the American Psychological Association (APA) format. At the end of the article, a reference list in alphabetical order must be given.

7. Disclaimer

The views and styles expressed in the articles in this publication are those of the individual authors and are not necessarily shared by the reviewers, the editors, the editorial consulting board, the Department of Science Education, or the Federal University of Technology, Minna.

Dr. Gambari, A. I.

Associate Professor

The Managing Editor, (JOSTMED),

Department of Science Education,

Federal University of Technology,

P. M. B. 65, Minna, Niger State, Nigeria.

E-mail: gambarii@yahoo.com; gambarisiaka@gmail.com
gambari@futminna.edu.ng ; gambari@codel.futminna.edu.ng

Website: www.gambariamosaisiaka.com

Mobile Phone: +234-816-680-7534; +234-803-689-7955; +234-805-558-6716

EDITORIAL BOARD

Editor-in-Chief	-	Dr. T. O. Alabi
Managing Editor	-	Dr. A. I. Gambari
Assistant Managing Editor	-	Mr. A. A. Yaki
Associate Editor	-	Mr. U. S. B. Idris
Associate Editor	-	Dr. O. C. Falode
Account Editor	-	Dr. (Mrs.) R. G. Wodu
Business Editor	-	Dr. (Mrs). A. Umeh

EDITORIAL ADVISERS

NAME	SUBJECT	ADDRESS
Prof. (Mrs.) V. I. Ezenwa	Chemistry Education	F.U.T. Minna
Prof. Afolabi Ayo Samuel	Civil & Chemical Engineering,	University of South Africa
Prof. M. O. Yusuf	Educational Technology	University of Ilorin
Prof. (Mrs.) R. Uyanga	Science Education	University of Uyo
Prof. P. A. O. Okebukola	Biology	L. A. S. U., Lagos
Prof. I. O. Inekwe	Mathematics Education	A.B.U. Zaria
Prof. Sanjay Mistra	Computer Cyber Security,	F.U.T. Minna
Prof. C. Ugodulunwa	Test and Measurement	UniJos
Prof. (Mrs.) U.N.V. Agwagah	Science Education	University of Nigeria Nsukka
Prof. J. M. Baba	Geography	F. U. T., Minna

SUSSCRIPTION RATES

Nigeria Rate (Personal)	N1,000.00
Rate (Institutions)	N2,000.00
Other Countries Rate (Personal)	\$25.00 / £15.00
Rate (Institutions)	\$35.00 / £22.00

All Cheques should be made payable to:

The Managing Editor, JOSTMED, Department of Science Education,
Federal University of Technology, Minna, Nigeria.
Subscription must be pre-paid and must include 10% handling charges

Copyright ©

Journal of Science, Technology, Mathematics and Education
All rights reserved

ISSN 0748-4710

CONTRIBUTORS TO THE ISSUE

1. **SULE, I. O., ODEBISI-OMOKANYE, M. B., GAMBARI-AMBALI, R. O., & OKEWALE, T. A.**
Department of Microbiology, Faculty of Life Sciences,
University of Ilorin, PMB 1515 Ilorin, Nigeria
E-mail: suleism@gmail.com
Phone No: +234-805-666-3764
2. **OYEDUM, U. M.**
Department of Microbiology, School of Life Sciences,
Federal University of Technology, Minna, Nigeria
E-mail: hemdi41@gmail.com
Phone No: +234-706-800-4509
3. **¹M. H. ALI, ²IBRAHIM YAHAYA MUHAMMAD, ²MUHAMMAD MUDASSIR USMAN & ²SUNUSI DAYYAB MUHAMMAD**
¹Department of Physics, Bayero University, Kano.
²Department of Physics, Kano University of Science and Technology, Wudil.
E-mail: alim@buk.edu.ng, Ibrahmyahaya29@yahoo.com, mmusman1007@gmail.com,
sunusidayyab@gmail.com
4. **IKECHIAMA F. N.¹, KWAHA, B.J.² & CHAGOK, N. M. D.³**
¹Department of Physics, Federal University Dutsin - Ma, Katsina State, Nigeria
^{2&3}**Department of Physics, University of Jos, Plateau State, Nigeria**
E-mail: fosuagwu@fudutsinma.edu.ng,
Phone No: +234-806-563-1514
5. **¹ODEBISI-OMOKANYE, M. B., ¹ZAKARIYAH, R. F., ²JIMOH, F. A. & ¹OLUGBADE, O. F.**
Department of Microbiology, Faculty of Life Sciences University of Ilorin, Kwara State.
Department of Biosciences and Biotechnology, Microbiology unit,
College of Pure and Applied Sciences, Kwara State University, Malete, Ilorin.
E-mail: Odebisimutiat@yahoo.com; odebisi.mb@unilorin.edu.ng
Phone No: +234-803-400-6111
6. **NGOZI BLESSING OSSAI-UGBAH, CLN¹. & PATIENCE ONORIODE KAYOMA²**
John Harris Library,
University of Benin, Benin City, Nigeria.
E-mail: ngozi.ossai-ugbah@uniben.edu, ladykayee@yahoo.com
Phone No: +234-802-361-3238
7. **ABDULKARIM NASIR¹, BORI IGE¹, TIMOTHY ENITIL¹, OLUWATOSIN SARAFA AZEEZ², ABUBAKAR MOHAMMED¹**
¹Department of Mechanical Engineering,
Federal University of Technology, Minna, Nigeria
²Department of Chemical Engineering,
Federal University of Technology, Minna, Nigeria
E-mail: a.nasir@futminna.edu.ng **Phone No:** +234-803-318-3561

- 8. ADAMA, C. J., SALAUDEEN, M. T., MAMMAN, E. W. & ABDULKADIR, A.**
Department of Crop Production,
Federal University of Technology, Minna, Nigeria
E-mail: cinwoj@gmail.com
Phone No: +234-806-333-0183
- 9. AYINDE, O. E., AYINDE, K., OMOTESHO, O. A. & MUHAMMAD-LAWAL A.**
Department of Agric – Economics and Farm Management
University of Ilorin, Ilorin, Nigeria.
E- mail: opeatyinde@yahoo.com
- 10. TSADO, J. H¹., O. B. ADENIJI¹, TYABO, I. S¹. & KOLO, E. S².**
¹Department of Agricultural Economics and Extension Technology,
Federal University of Technology Minna, Nigeria
²Niger State College of Education, Minna, Niger State, Nigeria
E-mail: jacobtsado2007@yahoo.com
Phone No: +234-806-526-8098
- 11. AKANBI, USMAN OLADIPO¹ & MUSA JOHN JIYA^{2*}**
Department of Agricultural Economics, Faculty of Agriculture,
University of Ilorin, Ilorin, Nigeria.
Department of Agriculture and Bioresources Engineering,
School of Engineering and Engineering Technology,
Federal University of Technology, Minna, Nigeria.
E-mail: johnmusa@futminna.edu.ng
Phone No: +234-803-668-2747
- 12. EYITAYO A. AFOLABI¹ & J. G. M. LEE²**
¹Department of Chemical Engineering,
Federal University of Technology, Minna, Nigeria.
²Newcastle University, Newcastle upon Tyne, United Kingdom.
E-mail: elizamos2001@yahoo.com
Phone No: +234-807-220-1514
- 13. A. B. ATTAH, A. P. ADEDIGBA & A. M. AIBINU***
Mechatronics Engineering Department
Federal University of Technology, Minna, Nigeria
E-mail: [*maibinu@gmail.com](mailto:maibinu@gmail.com), abiodun.aibinu@futminna.edu.ng,
Phone No: +234-802-949-4164
- 14. ABDULKARIM NASIR¹, SALIHU A. USMAN², ABUBAKAR MOHAMMED¹,
SHUAIBU N. MUHAMMED¹, & BORI IGE¹**
¹Mechanical Engineering Department, Federal University of Technology, Minna,
Nigeria
²Works and Maintenance Services, Federal University of Technology, Minna, Nigeria
E-mail: a.nasir@futminna.edu.ng **Phone No:** +234-803-318-3561

- 15. GAFAR MATANMI OYEYEMI¹, EYITAYO OLUWOLE OGUNJOBI², & ADEYINKA IDOWU FOLORUNSHO³**
¹Department of Statistics, University of Ilorin, Ilorin, Nigeria
²Department of Mathematics and Statistics,
The Polytechnic Ibadan, Adeseun Ogundoyin Campus, Eruwa.
³Department of Mathematics and Statistics,
Osun State Polytechnic Iree, Nigeria
E-mail: gmoeyemi@gmail.com
- 16. VICTOR O. WAZIRI¹, PATIENCE WOYE ADAMA² & AUDU ISAH³**
Department of Cyber Security Science,
School of Information and Communication Technology,
Federal University of Technology, Minna, Nigeria
²Department of Computer Science and Mathematics,
Federal Polytechnic, Bida, Niger State, Nigeria
³Department of Statistics,
Federal University of Technology, Minna, Nigeria
E-mail: victor.waziru@futminna.edu.ng, Yapacie123@gmail.com,
aisah@futminna.edu.ng
Phone No: +234-806-351-8931
- 17. ONUORAH, M. O.,¹ AKINWANDE N. I.², FARUK ADAMU KUTA³ & ABUBAKAR, U. Y.⁴**
¹Mathematics & Statistics Department, Federal Polytechnic, Nasarawa, Nigeria
^{2&4}Mathematics & Statistics Department, Federal University of Technology, Minna,
³Micro Biology Department, Federal University of Technology, Minna, Nigeria
Email: martins.onuorah@yahoo.com
Phone No: +234-803-076-4334
- 18. I. B. S. MOHAMMED & R. O. OLAYIWOLA**
Department of Mathematics,
Federal University of Technology, Minna, Nigeria
E-mail: olayiwola.rasaq@futminna.edu.ng, babashabafu@gmail.com
Phone No: +234-805-254-8167
- 19. NDAMAN ISAH**
Department of mathematics,
Niger State College of Education, Minna, Nigeria
Email: Isahgura@gmail.com
- 20. ¹VICTOR ONOMZA WAZIRI, PHD, ²USMAN ABDULQAHAR OZOVEHE, & ³AUDU ISAH**
^{1&2}Department of Cyber Security Science,
School of Information and Communication Technology,
Federal University of Technology, Minna, Niger State Nigeria
³School of Physical Sciences, Department of Statistics,
Federal University of Technology, Minna, Niger State, Nigeria
E-mail: ¹victor.waziri@futminna.edu.ng ²abdulqaharusuman@gmail.com, &
³aisah@futminna.edu.ng
Phone No: +234-806-351-8931

- 21. DR. (MRS.) ANGELA O. DARA & LAW-Obi FIDELIA N. (MRS.)**
¹Dept of Educational Psychology/Guidance and Counselling,
Alvan Ikoku Federal College of Education, Owerri, Imo State, Nigeria
²Science and Technology Unit, Dept of primary education,
Alvan Ikoku Federal College of Education, Owerri, Imo State, Nigeria
E-mail: daraangela2011@gmail.com
Phone No: +234-803-841-3888
- 22. OLUTOLA, ADEKUNLE T. (Ph. D.)¹, DARAMOLA, DORCAS S. (Ph.D.)² & SHEU, ADARAMAJA L. (Ph.D.)¹**
¹Department of Educational Foundations, Faculty of Education,
Federal University Dutsin-Ma, Katsina State, Nigeria.
²Department of Educational Psychology/G &C, Faculty of Education,
Federal College of Education, Owerri, Imo State, Nigeria.
E-mail: aolutola@fudutsunma.edu.ng, immaculatetabitha@yahoo.com,
adaramaja4real@yahoo.com
Phone No: +234-806-029-7940, +234-809-785-0451
- 23. SUNMAILA OYETUNJI RAIMI, OLUFEMI AKINLOYE BOLAJI, & ABIODUN EZEKIEL ADESINA**
General Studies Education, School of Education
Emmanuel Alayande College of Education
P.M.B. 1010, Oyo, Oyo State, Nigeria
E-mail: raimitunji966@yahoo.com, akinik1@yahoo.com, aeadesina2010@gmail.com
Phone No: +234-703-029-2283, +234-703-265-6077, +234-803-074-5843
- 24. LALEYE ADEMIOTAN MORIYIKE (Ph.D)**
Department of Science Education, Faculty of Education, Adekunle Ajasin University,
Akungba-Akoko, Ondo State, Nigeria
E-mail: dammylaleye@yahoo.com **Phone No:** +234-806-618-6034
- 25. FALADE, AYOTUNDE ATANDA (Ph.D) & SAMUEL, NATHANIEL**
Department of Educational Technology, University of Ilorin, Ilorin, Nigeria
Email: falade.aa@unilorin.edu.ng **Phone No:** +234-803-856-6249
- 26. ANAZA, ABDULMUMUNI ONUYI¹, ABDULLAHI, MUH'D-JIMOH A². & OHANADO, CLARA CHIBUZOR³**
¹Department of Curriculum and Instruction
²Department of Primary Education
³Department of Library
Federal College of Education, Okene, Kogi State, Nigeria
E-mail: anazaao@yahoo.com, claraohanado20@gmail.com,
Phone No: +234-816-581-8332, +234-803-572-5844
- 27. OLABIYI, O STEPHEN (Ph.D.)¹, JIMOH, J. A. (Ph.D.)² & OWODUNNI, A. SAMUEL (Ph.D.)³**
^{1&2}Department of Science and Technology Education,
Faculty of Education, University of Lagos, Akoka
³Department of Industrial and Technology Education,
Federal University of Technology Minna, Niger State
E-mail: Solabiyi@unilag.edu.ng
Phone No: +234-706-220-9015

- 28. MUSTAPHA, MULIKAT LADI ABDULQADIR (Ph.D) & MUHAMMED SHUAIB ABOLAKALE & ALWAJUD –ADEWUSI MARIAM B**
Department of Counsellor Education,
Faculty of Education, University of Ilorin, Ilorin, Nigeria
E-mail: ladiuthman9150@gmail.com
Phone No: +234-806-214-8082
- 29. BABA WACHIKO¹ & AHMADU HUSSAINI²**
¹Department of Primary Education Studies
²Department of Computer Science Education
Niger State College of Education, Minna, Nigeria
E-mail: wachikobaba35@yahoo.com
Phone No: +234-803-799-1635, +234-703-868-3373
- 30. BELLO, ZAKARIYAU ADEBAYO, BELLO, GANIYU (Ph.D) & PROF. ISAAC O. ABIMBOLA**
¹Department of Integrated Science,
Kwara State College of Education Ilorin, Nigeria
²Department of Science Education, University of Ilorin, Nigeria
E-mail: zakbay26@gmail.com, bello.g@unilorin.edu.ng, bllganiyu@yahoo.com,
abimbola@unilorin.edu.ng
- 31. OLASEDIDUN, OLUTOYE KUNLE (Ph.D) & BADMUS, AYODEJI MUIDEEN (Ph.D)**
Department of Curriculum and Instruction
Emmanuel Alayande College of Education, Oyo State, Nigeria
E-mail: olutoyeolasedidun@yahoo.com & badmusayomuideen@gmail.com
Phone No: +234-803-728-6108, +234-806-789-7787
- 32. OYENIRAN, SAHEED (Ph.D), PROF. A. Y. ABDULKAREEM & ATOLAGBE, ADEDAPO ADETIBA (Ph.D)**
Department of Educational Management
University of Ilorin, Ilorin, Nigeria
E-mail: saheed.oyeniran@gmail.com, ayabdulkareem@yahoo.com,
atolagbeadedapo@gmail.com
Phone No: +234-706-886-0689, +234—803-590-3513, +234-806-077-5914

TABLE OF CONTENTS

1.	Effects of 'Disinfectant A' on the Physicochemical and Bacteriological Quality of Some Well Water. Sule, I. O., Odebisi-Omokanye, M. B., Gambari-Ambali, R. O., & Okewale T. A.	1
2.	Comparative Study of Coliform Contamination of Public Wells and Pipe Borne Water Supplies in Bosso, Minna, Nigeria. Oyedum, U.M.	10
3.	On Particular Solution of Ordinary Differential Equations with Constant Coefficients: A Review. M.H.Ali, Ibrahim Yahaya Muhammad, Muhammad Mudassir Usman & Sunusi Dayyab Muhammad.	19
4.	Planer Inverted – F Antenna Design for Medical Implant Application at ISM 900 MHz. Ikechiamaka F. N., Kwaha, B.J. & Chagok, N. M. D.	30
5.	Microbiological and Physiochemical Assessment of Street Vended Fried Soyabean Cheese Sold within Ilorin Metropolis, Nigeria. Odebisi-Omokanye, M. B., Zakariyah, R. F., Jimoh, F. A. & Olugbade, O. F.	40
6.	Predictors of Mentoring Relationships of Certified Librarians in Nigeria. Ngozi Blessing Ossai-Ugbah, CLN., Patience Onoriode Kayoma.	53
7.	Energy Utilization, Conservation and Auditing in Nigeria Cement Industry. Abdulkarim Nasir, Bori Ige, Timothy Enitilo, Oluwatosin Sarafa Azeez, Abubakar Mohammed.	65
8.	Effects of Southern Bean Mosaic Virus on Growth and Yield of Soybean. Adama, C. J., Salaudeen, M. T., Mamman, E. W. & Abdulkadir, A.	79
9.	Sensitivity and Uncertainty Analysis: Applications to Small-land Scale Agriculture Systems in Kwara State, Nigeria. Ayinde, O. E., Ayinde, K., Omotesho, O. A. & Muhammad-Lawal. A.	87
10.	Assessment of Teachers' Perception on Agricultural Science Teaching Methods in Niger State, Nigeria. Tsado, J. H., O. B. Adeniji, Tyabo, I. S. & Kolo, E. S.	99
11.	Assessment of Cost and Returns to Cultured Fish Production in Kogi State of Nigeria. Akanbi, Usman Oladipo & Musa John Jiya.	108
12.	Experimental Study of a Single Phase Flow in a Pipe Separator. Eyitayo A. Afolabi & J. G. M. Lee.	116
13.	Development of Nigerian Vehicles License Plate Recognition and Classification System. A. B. Attah, A.P Adedigba & A. M. Aibinu.	125
14.	A Study of the Effect of Degradation on Industrial Gas Turbine Performance. Abdulkarim Nasir, Salihu A. Usman, Abubakar Mohammed, Shuaibu N. Muhammed, & Bori Ige	134

15.	On Performance of Shrinkage Methods – A Monte Carlo Study. Gafar Matanmi Oyeyemi, Eyitayo Oluwale Ogunjobi, Adeyinka Idowu Folorunsho.	142
16.	Analysis of Stock Market Exchange with Particular Instance From Nigeria Stock in Matlab and R. Victor O. Waziri, Patience Woye Adama & Audu Isah.	149
17.	Stability Analysis of Endemic Equilibrium of a Lassa fever Model. Onuorah, M. O., Akinwande N. I., Faruk Adamu Kuta & Abubakar, U. Y.	163
18.	Modeling and Analytical Simulation of Microbial Fate and Transport Phenomena in Porous Media. I. B. S. Mohammed & R. O. Olayiwola.	178
19.	Stability Analysis of the Disease-free Equilibrium State of a Mathematical Model of Tuberculosis Dynamics. Ndaman Isah.	191
20.	Comparison of Neural Network, J48, and Random Tree Based Algorithm for Anomaly Intrusion Detection. Victor Onomza Waziri, Ph.D, Usman Abdulqahar Ozovehe, Audu Isah.	201
21.	Assessment Skills and Competencies in Practice by Imo State School Counselors. Angela O. Dara & Law-Obi Fidelia, N.	213
22.	Assessing Teachers' Perspective of Challenges Militating against Implementation of School Based Assessment in South West, Nigeria. Olutola, Adekunle T. (Ph. D.), Daramola, Dorcas S. (Ph.D.) & Sheu, Adaramaja L. (Ph.D.).	220
23.	Effects of Computer Mediated Power Point Presentations on Secondary Students' Learning Outcomes in Basic Science in Oyo State, Nigeria. Sunmaila Oyetunji Raimi, Olufemi Akinloye Bolaji, & Abiodun Ezekiel Adesina.	229
24.	Development and Validation of a Computer- Assisted Instructional Package for Learning Basic Science in Nigeria. Laleye Ademiotan Moriyike (Ph.D.).	241
25.	College of Education Students' Accessibility, Attitudes and Competence towards the Use of Internet in Oyo State, Nigeria. Falade, Ayotunde Atanda (Ph.D) & Samuel, Nathaniel.	256
26.	Information and Communication Technology Competence among Lecturers of Colleges of Education in North Central, Nigeria. Anaza, Abdulmumuni Onuyi, Abdullahi, Muh'd-Jimoh A. & Ohanado, Clara Chibuzor.	264
27.	Investigation into Vocational Technology Teachers Competency and Utilization of Information and Communication Technology for Instructional Delivery in Lagos State. Olabiye, O Stephen (Ph.D.), Jimoh, J. A. (Ph.D.) & Owodunni, A. Samuel (Ph.D.)	276
28.	Effectiveness of Rational-Emotive Behaviour Therapy in Reducing Bullying Behaviour among in-School Adolescents Based on Gender and Age. Mustapha, Mulikat Ladi Abdulqadir (Ph.D) & Muhammed Shuaib Abolakale & Alwajud –Adewusi Mariam B.	287

29. The Effect of Anxiety on Pupils Learning and Retention of Mathematical Concepts in Some Selected Primary Schools in Bosso LGA of Niger State. **Baba Wachiko¹ & Ahmadu Hussaini**.....297
30. Identification of Misconceptions about Plant Held by Senior Secondary School Students in Ilorin Metropolis, Nigeria. **Bello, Zakariyau Adebayo, Bello, Ganiyu (Ph.D) & Prof. Isaac O. Abimbola**.304
31. The Perception of Colleges of Education Lecturers Towards Integrating Social Media in Instruction in Southwest, Nigeria. **Olasedidun, Olutoye Kunle (Ph.D) & Badmus, Ayodeji Muideen (Ph.D)**.314
32. A Data Envelopment Analysis Study of Nigerian Universities' Efficiency. **Oyeniran, Saheed, A.Y. Abdulkareem & Atolagbe, Adedapo Adetiba (Ph.D)**.323