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FEDERAL UNIVERSITY OF TECHNOLOGY,  
MINNA, NIGER STATE, NIGERIA  
SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION

# 8<sup>th</sup> SSTE INTERNATIONAL CONFERENCE

THEME  
**Emerging  
Trends  
in STEM and TVET  
in the  
21<sup>ST</sup>  
Century**



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## **FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA**

### **8<sup>th</sup> INTERNATIONAL CONFERENCE OF SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION (SSTE)**

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## TABLE OF CONTENTS

The affordances of indigenous knowledge in STEM and TVET education: What nascent research tells us. **Josef de Beer** 1

Emerging Trends in STEM and TVET in 21<sup>st</sup> Century. **Aloysius E. Uzoagulu** 13

The Ark of Salvation, Implementing Model for Stem Education. **Islam Alhag Abdou** 22

STEM Education in the U.S. **Binyao Zheng** 40

### **SUB-THEME: STEM AND TVET FOR ECONOMIC DIVERSIFICATION AND HUMAN RESOURCE DEVELOPMENT**

Effects of Low Income on the Standard and Quality of Residential Buildings in Kaduna State, Nigeria. **Yayock, D. S; Ayorinde, G. O; D. Ibrahim; C. O. Igwe and A. B. Kagara** 45

Efficiency of Ternary Blended Cements on Concrete Samples. **Olaleye, O.T** 54

The Role of Vocational Training in Bridging Skills Gap in The Building Industry of Nigeria. **Amuzie, I.L; Jimoh, C.A; Igwe. C.O; Ibrahim, D; Raymond, E.** 63

Analysis of Technical Skills Improvement Needs of MVM Craftsmen in Autotronics Servicing in Benue State, Nigeria. **Gbile, S. L, Dr. A. M. Idris, Dr. T.M Saba** 74

Cheap and Durable Method of Retaining Wall Construction Using Sand Crete Block. **Charles, I. E. & Musa, M. B** 84

Capacity Building Needs of Automotive Mechatronics Instructors in Maintenance of Braking and Ignition system in Vocational Enterprise Institutions in Abuja and Kogi State, Nigeria. **Ayoko Samson Oladeji; Abdulkadir Mohammed & Garba Aliyu Usman** 90

Characteristics of Concrete Containing Iron Ore Tailings as Partial Replacement of Sand. **Akilu, M. A.; Oritola, S.F.; Abbas, B. A.** 104

Automotive Air Conditioning System Maintenance Practices Adopted by Service Technicians in Niger State, Nigeria. **Ogunleye Uthman Olabode; Audu, R.; and Hassan A. M.** 114

Enhancing Critical Thinking Skills through Problem-Based Learning: The Mediating Role of Assessment Techniques. **Gimba Dogara, Muhammad Sukri Bin Saud, Yusri Bin Kamin** 125

Evaluation of the Implementation of Metalwork Curriculum in Technical Colleges in Abuja. **Luka, M.T., Oloyede, J., Idris, A. M., Mohammed, A., Ibrahim, D., Umar, I. Y and Raymond, E.** 144

Assessment of Resources Required for Woodwork Technology Education Programme in College of Education, Minna, Niger State. **H. Abdulkadir, A. Sabo, A. M. Hassan, R. Audu, & W. B. Kareem, A. M. Idris.** 155

**8<sup>th</sup> International Conference of School of Science and Technology Education (SSTE)**

- Effects of Scaffolding Teaching Strategy on Junior Secondary Schools Students' Achievement in Basic Science in Kontagora, Niger State. **Olalere Joshua., Olarongbe, G. O., & Bello R. M** 165
- Assesment of Tasks and Procedures Necessary for Students Practical Work in Block/Brick Laying and Concreting in Technical Colleges in Niger State. **Abubakar T., Abrak Y., C. O. Igwe, B. M. Mohammed, B. N. Atsumbe, & R. Audu** 172
- Assessment of Facilities and Method of Improving Students Performance in Electrical Installation and Maintenance Work in Technical College Kaduna State, Nigeria. **S. S. Haruna, A. D. Mansur, A M Idris, M. Abdulkadir, D. Ibrahim & A. B. Kagara** 186
- Relationship between Interest, Motivation and Chemistry Performance among Secondary Schools Students in Edu/Patigi Educational Zone of Kwara State. **Hassan Mohammed, Wushishi, D. I. & Tafida A. G.** 194
- The Self-Concept of Secondary School Students towards Biology Learning In Minna, Niger State. **Shopelu, B. O., Koroka, M.U.S. & Babagana, M.** 202
- Perception and Attitude of Undergraduate Students on E-assessment of Universities in Niger State, Nigeria. **James, John & Alabi, Thomas Omotayo** 211
- Prior Knowledge of Students in Mathematics as A Predictor of Academic Achievement in Physics Among Senior Secondary School Students in Abaji, FCT, Abuja. **Haruna Salihu Suleiman, Idris Haruna Alhaji, Bilkisu Abubakar Suleiman & Koroka M.U.S** 222
- Biology Practical Activities as Medium for Improving Academic Achievement of Senior Secondary School Students in Bwari Area Council of Federal Capital Territory. **Hajara M., Amina M., Saliha A.M. & Koroka M.U.S** 231
- Gender Issues and STEM Education in 21<sup>st</sup> Century. **Iroadimma, C. E, Isah, A. F & Koroka, M.U.S.** 238
- Assessment of Secondary School Science Teachers Pedagogical and Content Knowledge (TPACK) in Minna Niger State. **Eze Emmanuel Ifeanyi; Yaki, A. A.; & Bello R. M.** 244
- Chemistry Teachers' Self-Awareness as Correlates of Classroom Management Practices in Kwara State Senior Secondary Schools. **Limangba, I. J, Haruna, H. O, Adigun, O. P & Salaudeen, R. W.** 253
- Evaluation of the Implementation of Automotive Mechatronic Programme in Vocational Enterprise Institutions in Federal Capital Territory -Abuja and Kaduna State. **Nma Tauhid Nda, Abdulkadir Mohammed & Igwe Christopher Obeta** 258
- Perceptions of Undergraduate Students' on Academic Advisors Roles Towards Academic Success in Federal University of Technology, Minna. **Bello, M. R., Saifullahi. M. & Akinlaja, E. Y.** 269
- Application of Learning Styles in Technical Education: Meta-Learning Perception. **Alawode, O. D., Ekhalia, B. J., Akinpade, O. A. and Iliya Udu** 277



***8<sup>th</sup> International Conference of School of Science and Technology Education (SSTE)***

Assessment of Extrinsic and Intrinsic Motivational Factors Among Science Teachers Attrition and Retention in Minna Metropolis Niger State. **Haruna, H. A., Bashir A.U., & Hassan A.A.** 287

**SUB-THEME: INSTRUCTIONAL APPROACHES IN STEM AND TVET**

Application of Technical Vocational Education and Training in Science Technology Engineering Mathematics for the 21<sup>st</sup> Century Learning in North Central Nigeria. **Agada, A. M, Okoh Miller Adaga D.** 294

Strategies for Improving Students' Acquisition of Practical Skills in Electrical Installation and Maintenance Work Trade in Technical Colleges in Sokoto State. **Abubakar, Lawali Bado., Mamudu, A., Dr. S. A. Owodunni.** 304

Assessment of Technology Education Lecturers Competencies in the Application of ICT for Instructions in Tertiary Institutions in Niger State, Nigeria. **Isaac, J.; Samson N; B.N. Atsumbe; & S.A. Owodunni.** 317

Availability and Utilization of Educational Resources for Effective Teaching of Electrical/Electronics' Technology at Minna Innovation Enterprise Institute of Niger State. **Mamudu, A., Haruna, S. S.; Mansur, A.D.; Raymond, E.; & Saba, T. M.;** 326

Teaching Method for Technical and Vocational Training Education: A View into Project- Based Learning in Nigeria. **Owolabi Sunday Oluwatosin; Basheer Garba Fagge; Usman Nazifi Lawan; & Usman Adamu Jabdo** 337

The Effect of Computer Simulation Instructional Package on Physics Students' Achievement in Jalingo Education Zone Taraba State. **Orinya Edwin Orinya; Gana, C.S.; & Shitu, K. O** 346

Effects of 5Es Instructional Model and Reflective Discussion Instructional Strategy on Algebra Achievement of Secondary School Students in Niger State. **Kure, Isah Danjuma; Gimba, R.W.; Dr. Hassan A. A.; & Dr. A. Ndanusa.** 359

Assessment of Non-Technical Skills Required by Graduates of Electrical Electronics Technology for Employment in Industrial Organisations in Kano State. **G. E. Obadiah, L. Tewase, E. Raymond & W. B. Kareem.** 371

Assistive Technologies for Teaching and Learning among Children with Special Needs. **Danjuma, Christiana Suzan and Alabi, Thomas Omotayo** 380

Assessing the Levels of Awareness and Utilization of Assistive Technology Tools for Learning in Niger State School for Individuals with Special Needs. **James, Stephen & Tukura Charles Saidu** 391

Multimodality in Education: The English Language Experience. **Felicia Chibuogwu Chike-Okoli.** 400

Memory-Capacity and Intelligence as Predictors to Academic Achievement in Biology among Biology Education Students in North-Central Universities, Nigeria. **Dangana Musa, and Aboyeji Oyeibanji O., and Abubakar Kasim Auwal.** 409

Enhancing Critical Thinking Skills of Students' through Project-based Instruction: A Mandate for Secondary Schools in Nigeria. **Ochigbo Faith Ihotu; Yaki, Akawo. A.; Koroka, M. U S.** 417

**Multimodality in Education: The English Language Experience**

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**Abstract**

*The art of teaching, generally, has been an issue attracting significant attention of educators in the world of schooling. Efforts at making positive impact on learners' performance has caused many teachers at different levels of education to seek alternative strategies to strengthen teaching and improve students' achievement. However, much of these alternative efforts have been traditional teacher-led, which exclude students from active participation in the process. Recent academic efforts have begun to explore the inclusion of learners, introducing learner-centred activities, aimed at bringing learners to the centre of classroom activities. One of such efforts is multimodality which is the use of multiple modes in teaching and learning. This paper reviews the place of engagement of multiple modes in the classroom, with emphasis on English language. The concept, the benefits of multimodality to the teacher and the learner and also the challenges to multimodality were discussed. The paper also presented reviews of some experimental studies carried out on the effects of multimodal strategy on English language learning in approval of the strategy. Suggestions on how to integrate multimodal learning into the classroom were also made.*

**Keywords:** Multimodality, Modes, Teaching and learning, Classroom activities.

**Introduction**

In every learning environment, there are different categories of learners, each acquiring and building knowledge at his own pace in his own peculiar way. These varied categories of learners can be found in a single setting with a single teacher who must aspire to meet the needs of every individual learner to achieve the set educational goals. In trying to accommodate these categories of learners, with their different learning styles, multimodal learning becomes apparent and necessary. It is often overwhelming for a teacher to adequately meet the learning needs of individuals with different abilities in a single classroom encounter. Yet, each classroom has compositions from different learning backgrounds and abilities that must be accommodated. Thus, multimodality is a bail-out for the teacher in a class of various learning styles.

Multimodality in education implies the application of multiple learning modes, each supporting the other in a unique way. It is the interplay of different learning strategies that benefit learners in one way or the other. In every learning environment, populated by high ability learners, medium ability learners, low ability learners and even struggling learners or special learners, which is often the case, there is often difficulty carrying all these categories along at the same pace. Thus, the essence of multimodal teaching is to be able to cater for the learning needs of these categories of learners, to the extent that every learner should be able to benefit from, at least, one of these modes in a single learning context. Simply put, multimodal learning means teaching using multiple modes. These modes could be music, speech, writing, drawing, graphics, kinesthetic, language (written or spoken), and so on. It is believed that learning is more effective when teachers appeal to different learning sensory modes at the same time which is only possible through multimodal



learning. The point being made here is that there are relevant options available to teachers in the class other than the use of one mode.

Multimodality came as a response to changes brought about by technological innovations which were directly and indirectly influencing and changing the way people learn and also redefining literacy as a whole. It is also a challenge to monomodal learning strategy which focuses on the use of a single mode of instruction in teaching and learning (Bateman, 2008). In moving away from the traditional practices of teaching with one modality scholars recognize that learners learn in different ways and so the teacher should be able to deliver lessons with strategies that allow different types of learners to process information through multiple modalities. It therefore, implies that a learner can apply more than one meaning making mode in interpreting and in responding to a text. Similarly, the teacher can apply more than one meaning making mode in lesson delivery because each of these modes often goes with a different effect in promoting learning and literacy practices. The dominant theoretical paradigm within the field of multimodality and education concerns itself with how human beings use different modes of communication to create meaning (Kress and van Leeuwen, 1996, Kress, 1997; Van Leeuwen, 2005). It involves multiple ways of knowing and all these modes are co-dependent.

Multimodal learning practices are rooted in Multimodal theory of Jewitt and Kress (1996) which posit that language is not the only form of communication available in teaching and learning. This theory understands meaning representation and communication to be more than about language but draws on a multiplicity of modes, all of which contribute to meaning, directly or indirectly. It embodies how people learn, communicate and convey information using different forms of channels and using them most effectively to create immersive and dynamic learning experiences. They, therefore, argue that modes other than language can be used for meaningful communication. For instance, a learning situation that integrates pictures, speech/language, gestures/movements, colour, should be expected to carry a good number of learners along as it concerns understanding and making meaning from the information conveyed. Similarly, in a hearing-impaired classroom, an audio/video presentation would benefit them less than text/video presentation mode.

The summary of this discourse is that scholars are increasingly recognizing that in any communicative occasion, language, whether written or spoken, is only a part of the meaning making resource. Jewitt and Kress (2003) have noted that any communicative event involves simultaneous modes whereby, meaning is communicated in a variety of ways. Thus, other meaning making resources provide different logics and effects, aside language resource, as the user considers most suitable for the expression of meaning at a particular context.

#### **What is a Mode?**

A mode is any means or method of expression and presentation of information such as writing, drawing, art performance, speech, images, colour, and so on. In other words, a mode is any form of communication which a communicator has chosen as a means of interacting with an audience in order to convey information. However, any such chosen means should be able to cater for the specific needs and preference of the learner. In the teaching/learning situation, a mode is the way or manner in which teaching/learning is carried out, experienced or expressed. It can also be seen as a method employed to carry out teaching/learning. Linguistically, a mode is a meaning making resource or form of communication within various sign systems that convey accepted meanings



(Stein and Newfield, 2006), enabling different kinds of knowing or being. Every mode of instruction carries a different possibility of meaning, though, some modes are more effective than other modes in meaning bearing, for certain kinds of meaning representation. Thus, different learners engage with different modes differently with respect to their engagements, recognizing that meaning is not inherent or given in only one mode. A teacher can choose to employ two or more modes in a single learning situation thereby bringing in multimodality into learning.

In knowledge construction and meaning making, there is an issue of what to do with one mode or another or with a combination of modes (Evans, 2005). Unlike in a single mode situation, there are different possibilities for meaning making in multimodal contexts. Such modes as language, movements, drawing, colour which integrate both visual, audio and also writing are meant to present learning in a variety of ways to enhance understanding and retention. For instance, an image or drawing or dance will offer different affordances for understanding, interpretation and meaning making. In live multimodal environment, which may include, but not only, dance, performances, oral storytelling and presentations, meaning is conveyed through a combination of various modes such as gestural, audio and spoken languages.

In considering the concept of affordance, the issue of what one mode offers that the other mode does not offer becomes important. What a written passage allows a reader to do that a diagram or play does not, can make a lot of difference in meaning making. Modes like audio, colour, drama, visual, and so on, offer different affordances that can affect meaning, understanding and interpretation. This means that a learner may understand a text better when dramatized than when ordinarily read or drawn. A comparison between a novel and a film based on the same novel can reveal the issue of affordances and how a reader can be positioned in relation to them.

The underlying principle is that the dullest of learners will be able to actively participate in the learning process and be able to benefit fully and make meaning from, at least, one of the multiple modes used in communication. This is because the distinct potentials of each mode to break down communication into parts harnesses the simplification of complexities of content materials. Thus, Kress and van Leeuwen (2001) referred to affordances as the realization of different kinds of instructional possibilities and learning engagements that multimodality and multiliteracy materials make available to teachers and/or learners.

#### **A Paradigm Departure in Instructional Methodology**

Multimodality began to receive significant definition in the 20<sup>th</sup> Century with exponential rise in technology which created many new modes of presentation. The monomodal or single mode which used to define the presentation of information and interpretation of text is being replaced by complex presentation formats. Multimodality, therefore suggests a shift from the traditional method which is paper-based to more complex methods such as screen-based texts, with the affordances. Comparing a single mode environment and a multiple mode environment is like comparing chalk board and digital board, in both affordances and the ease of use, as well as the inherent potentials in them.



<b>Traditional/Single Mode</b>	<b>Multiple Mode</b>
1. Single learning style	Multiple learning styles is a single context (3 or more modes, up to 5)
2. Teacher centered instruction	Learner centered activities
3. Single sensory simulation	Multisensory simulation
4. Passive learning, receptive	Active, enquiry-based learning
5. One size - fits - all – model	Proactive and well planned.
6. Regurgitation of information	Authentic learning

### **Benefits of Multimodal Learning**

Among the benefits accruable to learning when the environment allows instructional elements to be presented in more than one sensory mode (visual, aural, written, etc.) are:

- It enables students to make preferences of learning styles which may lead to improved quality of learning when content is matched with the best learning mode. It could lead to learners developing stronger desire to learn new materials.
- Multimodality can give rise to a more balanced approach to studying and learning and hence a more comprehensive devotion to studying and understanding.
- It stirs up creativity and spurs students to use different parts of their brain in critical thinking in view of multisensory modes they employ, thereby, diversifying learners' world outlook.
- It accommodates and engages all categories of learners in a single learning context. Each learner should have one or two modes among others that he/she can comfortably adapt to and benefit from. This is a way of ensuring that no learner is left out of the learning process. It improves the quality of learning by matching content with the best modes of learning.
- Multimodality engages the learners mind and keeps it from wondering in thought, thus, creating a clearer focus for learning.
- Multimodality is way from the traditional learning experience which reduces classroom experiences to a bore.
- When a variety of activities go on in a single learning encounter, there will be no dull moment. The active involvement of learners will help them extend attention span and also retain information acquired.
- In multimodal learning, learners can choose any mode of study that best suites them for a particular learning experience. This means that all categories of learners can be taken care of in a single class as each of them fits into a more accommodating mode for maximum benefit.
- Multimodal learning enhances students' ability to learn more because every obstacle is cleared by one mode or the other. For instance, when comprehension of a reading material fails, a visual or kinesthetic presentation of the same material could result in a more positive learning. For instance, reading and comprehension of any Shakespeare's works may be problematic to some students but watching a play let of the same text will offer different kind of experience and understanding.

### **Benefits of Multimodality in Teaching**

Education has evolved to recognize that learning takes many forms and is multisensory. To this end, multidimensional approach that could trigger multiple simulation are being advocated to maximize teaching and learning. This practice can benefit the teacher in a variety of ways:



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- ❖ It expands the creativity of the teacher when it comes to the point where he/she flexes his/her creativity muscles by researching and piecing together the best resources to supplement lessons. Through these resources, the teacher challenges students to approach problems in new ways and showcase their unique abilities.
- ❖ The teacher evolves into a champion of diversity by exposing learners to the complexity of real-world interactions through diversity of learning resources.
- ❖ The teacher also enjoys the opportunity of developing his/her own skills and competencies in as many resource skills as possible.
- ❖ Multimodality helps the teacher to improve the quality of instruction by matching content delivery with the best modes of learning for learners.
- ❖ Multimodality engages the mind and creates a clear focus for the teacher.
- ❖ It relieves the teacher of the burden of classroom domination.
- ❖ Class management becomes easier for the teacher as even the dullest of learners will be able to understand concepts and make meaning from: at least, two of the modes used in instruction.
- ❖ Multimodal instruction will enable the teacher to accomplish more, with students' involvement in the learning process.
- ❖ Multimodal teaching strategy is away from the conventional teaching strategy, thus, marking a departure to effective teaching by promoting students' involvement in knowledge acquisition, and interpretation and communication.
- ❖ The use of multiple teaching modes helps the teacher select appropriate teaching modes for each category of learning style.

However, multimodality is not going to replace the traditional literacy values but rather introduces new forms to augment the existing form. The traditional knowledge of reading and writing is still important but the new modes are integrated into the old to complement the inherent possibilities and competencies (Miller and McVee, 2012). Learners still need to know how to read and write but new literacy modes are integrated with new learning outcomes presented in new forms as multimodality in the classroom, from paper-based to multiple modal based outcomes.

#### **The English Language Experience**

Scholarship in multimodal studies has grown especially within the last decade. This implies a knowledge shift from the sole mode of written language as a means of interpreting written text and making meaning. In a multimodal knowledge shift experiment conducted by Robert on his grade 10 and 11 adolescent students in South Africa out of frustration when his students failed to improve in their English performance because of breakdown in the culture of learning", Stein and Newfield (2004) reported that at the end of the year, Robert's students showed a dramatic improvement. Robert had experimented on the use of drawing pictures, singing songs and performance plays to improve students' performance English language. At the end of the year, there was dramatic improvement, as out of 140 students, only one failed the English language examination.

In a study titled 'Engaging students through multimodal learning environments: The Journey continues', Sankey, Birch and Gardiner (2010) also sought to find out the usefulness of having a combination of resources in a single contact lesson and whether multiple representation of content lead to improved learning outcomes. Their findings showed that 91.8% of participants improved from pretest to posttest scores. Similarly, Chikwendu (2016) in a study examined the effects of



Multimodal Literacy Strategy on English language reading comprehension outcomes of senior secondary school students in Niger State, Nigeria when compared with two other strategies. Using the multimodal resource elements of language, drama and drawing in experiment, findings showed that multimodal literacy strategy had the highest mean scores among male participants both in the high verbal ability group, the average verbal ability group and the low verbal ability group respectively. compared with the other strategies. Among female participants, the multimodal literacy strategy had the highest mean score among high, average and low verbal ability groups. The superiority of multimodal strategy over other strategies is evident in the study.

Kendrick, Jones, Mutonyi and Norton (2006) did a study in English education in Ugandan Primary and Secondary Schools in two different districts and showed how the incorporation of multimodality as an instructional strategy in mainstream schooling offered innovative possibilities for how teachers might validate students' literacy, experiences and cultures to support English language learning in the classroom. The authors showed how the creative use of drawing, photograph and drama provided opportunities for students to improve their understanding and use of English language.

In a study on explore English as a second language learners' exploration of multimodal texts in a junior high school in United States, Ajayi (2009) explored the principles that English as a second language learners employed to interpret advertisement images and how they used visual representation to convey their understandings. The study showed that the use of multimodal resources had the potential to enhance language and literacy learning in a way that was transformative. The students experienced the advertisement in the study in new ways, and produced new meanings which reflected their personal interests. The study also showed that the use of multimodal strategy allowed the students to enter into text composition from different paths. Studies in multimodal teaching and learning resources are diverse and cut across disciplines and subject areas. However, researches in multimodality are evolving, even though there is not much of it in Nigeria. It is hoped that as emphasis is continuously laid on this area and more awareness created through research and reviews, multimodality would be appreciated more in this part of the world. It is also hoped that multimodality could replace monomodal practices in schools and in learning generally, in the future.

### **Challenges to Multimodality**

There are possibilities and challenges to multimodality in teaching and learning English as a second language. Yougjoo (2014) posits that some issues could hamper effective application of multimodal resources in the classroom. Some of the challenges outlined include that:

1. Some students do not have access to digital technology to effectively participate.
2. The task of helping second language learners develop conventional academic literacy along with multimodal (digital) literacies can overwhelm the teacher.
3. Some students are more multimodal than others or are richer in digital experience than others. It can thus, be challenging to accommodate those with little or no digital multimodal experience and those with much experience in the same class activities.
4. Prescribed curriculum could be a challenge to multimodal instruction as much as it lacks multimodal outcome. In the same manner, multimodal techniques are a challenge to conventional curriculum.



5. When teachers are not trained on the use of some multimodal resources especially the ones involving technology, it can be problematic.
6. Sometimes, selection of interaction modes is teacher centered without recourse to students own preferred learning mode. What goes for one may not go for the other. Some learners might just prefer monomodal communication, for instance, only reading written texts or only images.

### **Integrating multimodality into learning**

To make a seamless switch to multimodality, the following suggestions could be useful to the teacher:

Excite your students with interactive exercises through visuals. Visuals are iconic and normally are more concrete symbolic representations of reality. This is not the same with spoken or written word. Since diverse methods are needed to engage diverse learners, the teacher could go for charts, pictures, artworks, drama and other representations that could catch their eyes and attention to make them see the content in a new light. Visual referents promote understanding and enable accurate interpretation and retention of contents. The more iconic or pictorial the referents are, the more likely they are to promote understanding and meaning making.

The teacher could continue direct teaching in learners' familiar style and then introduce mixed modes in the virtual realm. Other modes like play lets, games, and mixed media could come in too, all tailored towards students' needs. The teacher could take advantage of blended learning environment to encourage learners to identify their strengths and personal competencies.

In introducing multiple modes, the teacher should avoid using the same modes for every lesson and every day. Again, using too many modes at a time can even overwhelm learners and become counterproductive. There should be a balance of modes that can engage and yet interest learners. The teacher should track students' progress to ensure they are retaining information and developing their skills in line with the set educational objectives.

### **Conclusion**

Multimodality is emerging and gaining ground in the world of teaching and learning. The life that the strategy brings to classroom activities commends it to scholars in language education as it tends to expand learning and skills acquisition beyond the confines of the classroom. The benefits accruing to multimodal learning seem to outweigh the challenges that befall it. Engagement with multimodal teaching and learning resources could motivate enquiry in learners, promote students' engagement with text materials and improve their learning and even attitude to schooling. This implies that apart from promoting active participation in reading and interpretation of texts, doors are opened for lifelong learning by the developmental skills that learners acquire through engagements with different modes. Thus, in this 21<sup>st</sup> century, there is need to renegotiate educational expectations and so, educators must pay attention to emerging strategies and technologies which are striving to liberate knowledge from the limitations of traditional educational methodologies.



## Recommendations

The following recommendation are made based on this review of multimodal application in teaching and learning in the classroom:

1. Obsolete curriculum currently being used in all levels of school learning should be replaced by more current curriculum that reflect the reality of 21<sup>st</sup> century multimodal engagements.
2. English Language teachers, and indeed all others, should be exposed to and trained on the use of multimodal learning resources to enable them function effectively in the multimodal classroom.
3. Learners should be exposed to multimodal learning resources early enough in life to enable them get used to the resources when they get to school.
4. Digital technology should be made available to learners both at home and in the school to help them cultivate the culture of independent or shared learning.
5. Teachers should endeavor to understand their students to understand their individual learning styles to enable selection of appropriate learning resources for different categories of learners.

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