



Integration of Practical Strategies in Teaching

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Abstract: The problems of any educational system is attributable to many factors, but one factor that has borne most of the accusation is the classroom teachers. While teachers cannot do a lot about shortage of teachers and employment of unqualified and unprofessional teachers, the can do a lot about what goes on in the classroom, one of these is how they engage learners in class activities. Practical strategies are teaching-learning strategies that ensure that learners are actively involved in the instructional process. Some of the practical strategies that can be used in the learning situation are effective communication, stimulating all the senses, creating a conducive learning environment, encouraging class participation, encourage positive self-concept, make learning fun, integrate technologies and using constructivists' strategies.

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1. Introduction

Teacher competence is very important to the educational system. This is more so in Nigeria, especially at this point in time when there is a downturn in the economy of the country. Parents want to see that the money they spend on their children's education produces fruitful results and not be constantly given reports of massive failures at public examinations such as the University Matriculation Examination (UME) conducted by the Joint Admissions and Matriculations Board (JAMB); the Senior School Certificate Examination (SSCE) conducted by the National Examination Council (NECO) and the West African School Certificate Examination (WASCE) conducted by the West African Examination Council (WAEC). The analysis of the nationwide examination conducted by JAMB from 2013 to 2023 shows that the highest percentage of candidates who got the pass mark of 200 out of 400 marks was 44.91% in 2013. In most years the percentage of people who got this score was 14% in 2021; 21% in 2022; 25% in 2018; and 14% in 2019 (Alabi, 2021; Osayande, 2021; Tolu-Kolawole, 2022; UTME Official, 2024) The number of candidates that scored higher scores have been paltry. Only 10 students out of One million, seven hundred and thirty-five thousand, seven hundred and twenty-nine (1,735,729) candidates scored up to 300 in 2013 (Slideshare, 2013). In 2014 only 25 candidates of nearly 2 million candidates scored up to 250 marks out of the total 400 marks. Although the situation has since changed and gotten slightly better, the performance of candidates of these examinations is still a far cry from what is desired.

This is happening in a country with a very high desire for higher education (UTME Official, 2024). The situation has not been different in the other national examinations. Even though this is the Nigerian experience, the situation is not much different in other parts of the world.

Although several factors have been blamed for the ever-poor results in the country's educational system, one section of the school system that continuously bore the brunt of this blame is the teaching force. There are accusations of shortage of teachers, unqualified teachers, incompetent teachers and poorly motivated teachers (Osayande, 2021). As teachers employed in the school system, who do not have much say in government or school administration, there is not much they can do to ensure that there are more teachers in the schools than the government and private proprietors are willing to employ; there is also not much they can do to ensure that the best teachers are employed. As individuals and school administrators, however, the teachers can ensure that they are very competent in their chosen profession and occupation, which is the noble profession of teaching. There are many ways of enhancing competence in teaching. This paper is, however, interested in the issues of integrating practical strategies in teaching.

Teaching

Teaching is the process of involving individuals in activities that bring about desired changes in their behaviour. It is one of the most important activities in a society and to people because it is an activity in which an individual helps another person to learn. It helps people gain the knowledge, skills and attitudes they need to be responsible citizens, earn a living and lead a useful rewarding life. Teaching provides the chief means of passing existing knowledge on to the next generation and also developing new ones in learners (Omieibi-Davids, 2019).

Teaching is important to the existence and development of society. If there were no teachers, people would have to learn everything by themselves. This would be a difficult thing to do because very few people could learn enough on their own to get along in the world. Most people would most certainly only bother to learn those things they can do without much effort and leave those things that give them any form of difficulty out of their education. Without teaching, the world itself would change greatly as humanity would lose the knowledge, skills and ideas past down from past generations and will not be able to develop new ones. In order to be effective in doing their work teachers need to have the following qualities (Amadi, 2006; Victor-Ishikaku, 2022):

- i. Sound knowledge of their subject matter.
- ii. Ability to understand their learners.
- iii. Ability to communicate effectively.
- iv. Ability to inspire the learners.
- v. Resourcefulness.
- vi. Ability to exercise authority judiciously – create a conducive learning environment.
- vii. Ability to demonstrate sound judgement – be fair in their dealings with everyone in the classroom.
- viii. Have good personality – internally and externally.

Practical Strategies

Practical strategies are effective strategies that are used in teaching and learning. They are instructional approaches that are effective in various situations that achieve desired outcomes. They are learning strategies that aim to involve the students in the learning process by promoting and immersing them in hands-on activities, real world application, effective participation and problem solving, investigate and experience the subject matter (Shibley, 2011; Pathak, 2023; Centre for Learning and Teaching, 2024). Practical strategies entail things like that ensure teaching Social Studies in a way that the desired results are not only achieved, but the students actively participate in the processes involved; teaching Mathematics to non-science inclined students in a way that they do not just understand it but actually enjoy learning the subject; teaching children to read in a way that they develop good reading habits throughout their lives.

The strategies involved in making learning effective with one group of learners and in one situation might be different with what is effective with another group of learners and in another situation. This is because people have different styles of learning (Duckett & Tatarkowski, 2005; Victor-Ishikaku, 2022). There are, however, some common practical

strategies that can be employed generally in all situations. Some of these are the following:

Communication: Communication is the process of exchanging information between two or more persons. For communication to be said to have occurred, there has to be a message sent and a feedback to ensure the message was received correctly. Communication is important in teaching because it helps to involve our students effectively in the various activities necessary to bring about the desired changes in behaviour (Omieibi-Davids, 2019). Communication in the learning situation involves the use of verbal, non-verbal, written and visual forms.

Verbal Communication is the exchange of information between person that involves speech. Also known as Spoken communication, it involves the use of the voice or speech. It involves any interaction between persons that has to do with talking, such as face-to-face, telephone, radio or television (Pavlovic, 2023). In this situation, the individuals involved in the communication process talk to each other (Victor-Ishikaku, 2022). This is common in the teaching-learning process. Apart from teachers who teach deaf students, most teachers in the school system talk or make their students talk most of the time they are in the classroom. There are various ways of making verbal communication effective in the classroom. Some of these are as follows:

- i. Speak clearly. It is important to speak loud enough for the whole class to hear. It is necessary to avoid situations that mumble up words. To ensure clarity of speech it is necessary for teachers to avoid talking when their back is turned to their students, like while writing on the chalkboard.
- ii. Pronounce words clearly. It is necessary to use intonations that are natural to the teacher, but in doing so it is important not to allow one's native tongue interfere with the lingua franca or language of instruction, which in the Nigerian situation, is English Language (Federal Republic of Nigeria, 2013)
- iii. Speak at the pace of the learners. It is necessary that the teacher does not talk too fast. It is important for him/her to remember that they are talking to people who need to hear them to understand what they say
- iv. Define concepts clearly and correctly
- v. Use examples and illustrations in the explanation of concepts
- vi. Encourage class discussion
- vii. Read out important memorable passages
- viii. Use radio and tape recordings when applicable (Omieibi-Davids, 2021; Duckett & Tatarkowski, 2005; Victor-Ishikaku, 2022).

Non-verbal Communication is the exchange of information between persons that does not involve speech. Also known as non-discursive communication, this is any form of communication that does not involve speech or writing. This type of communication includes body language, gestures, facial and eye movement, tone of voice, action and reaction, smell/scent, emotional state, dressing, where and how we sit or stand. There are two aspects of non-verbal communication. They are Expressive and Interpretative non-verbal communication. Expressive non-verbal communication is the process of expressing ourselves through any medium apart from talking and singing. It involves sending a message with our movements and gestures. This is so when we wink, frown or touch our learners in the learning situation. This is involved when the learners raise their hands to ask or answer questions. Interpretative non-verbal communication is the ability to interpret positions, movements and gestures. It is the ability to interpret correctly and accurately an unspoken message that has been sent through any of these mediums. In the classroom situation it refers to the teacher's ability to determine when learners have difficulty understanding a particular concept. Non-verbal communication is particularly effective in providing class control in instruction. Examples are the following (Dease & White, 2023):

- i. Make eye contact
- ii. Use gestures – hand movement, body movement, head movement, etc
- iii. Move close to students without saying anything.

Written Communication is the exchange of ideas through writing. It includes writing on the chalkboard, writing in learners' books, letters, emails, social media, books, magazines, internet, textbooks, newspapers, cartoons, comics, journal, and so on (Indeed Editorial Team, 2023; Denome, et al, 2023). One of the places we use written communication the most is the Chalkboard. The Chalkboard is any reusable surface on which text and drawings can be made with the aid of a stick of chalk. The chalkboard was traditionally known as the

blackboard because of the black colour with which it has long been associated. It is now called chalkboard because the colour of modern-day chalkboards is not always black. They are white, brown, yellow, green and even blue. The chalkboard can be effectively utilised in the following ways

- i. Write legibly
- ii. Write important points of the lesson instead of lengthy notes.
- iii. Write new and difficult words, names and dates for emphasis.
- iv. Put up illustrations.
- v. Do not talk while writing on the board.
- vi. Wipe the chalkboard at the beginning to rid it of the previous teacher's work or the previous lesson.
- vii. Do not ask questions with their answers on the board.
- viii. Stand by the side of the board to avoid covering what is written on the board.
- ix. Ask students to participate in class by writing on the board, e.g. Mathematics problems, new or difficult words, paste things on the board, etc (Omieibi-Davids, 2021).

Visual Communication is the use of visual elements to convey information (Alcocer, 2024). This could include still or motion. Examples of this are real things, drawings, paintings, Pictures, Charts, Graphs, Sign language, etc. Visuals play a huge role in communication, especially in classroom instruction, but they are also easily misused. There are two types of visual languages in communication. They are the Iconic and Digital visual languages. Iconic visuals are visuals that resemble the things for which they stand. They are visuals that resemble the real thing (Cheprasov, 2024). A still picture, a sculptured figure, a drawing and painting are all examples of iconic visuals. A drawing of a pencil, for instance, shows us what a pencil looks like. If an individual that knows what a pencil is but does not know the name is shown the drawing, he will be able to recognize a pencil from the drawing. A visual is digital when it does not resemble what it stands for (Omieibi-Davids, 2019). When we write PENCIL instead of drawing it, we are making use of digital visuals. If we do not know what a pencil is, writing the name will not make us know it as in digital visuals.



PENCIL

Iconic Visual

Digital Visual

Types of Visual Languages (Omieibi-Davids, 2019).

Instructional Media are devices used in communication and information dissemination. Known as instructional materials or teaching aids in the instructional process, they are all human and non-human resources that are used to enhance learners understanding of a particular concept or skill. Instructional media go a long way in passing on necessary information or feedback to the learner in the classroom. To be able to communicate, however, it is important to use the right media in instruction. The best instructional media to use in classroom communication are Realia (Real Things). This is because they are things that actually exist. They are seen, touched, felt, handled, smelt or tasted. They are samples of everyday things that are brought into the classroom or things outside the classroom that learners are taken out to see. They could be natural things that are living such as animals and plants, or non-living things like rocks and mountains. They could also be man-made things like chalk, paper, artefacts and ancient tools. It is in the absence of real things that teachers resort to other representative media. This is because real things may not be available for use as they could be out of season like fruits; too small like ants; invisible like the digestive season; too delicate like the mosquito or too dangerous like snakes. In using real things in instruction, it is important to let the students experience them by touching, listening, tasting, smelling, feeling, climbing and so on. It is also important to let students participate in out-of-classroom activities, experiments and excursions to enable them experience real things in their natural environment (Rios, 2019).

In using instructional media that are not real things, it is important to choose materials that provide experiences that are close to the real things as possible. Thus, if the real material has sound and motion, use media that present these two features like video, television and

the film. When it deals with seeing three dimensional materials there is the models, mock-ups and diorama. In dealing with visuals like graphs, charts and maps, it is necessary to minimise the verbal information and use visuals that are colourful over black and white illustrations. This gives the learners a closer feel of reality (Duckett & Tatarkowski, 2005; Omieibi-Davids, 2019).

Stimulate all The Senses. There are 5 human senses. They are the sense of hearing, sight, taste, smell and touch. In the course of teaching, a lot of teachers stimulate the sense of hearing and sight when they teach because they talk and write or show things to their students. In doing this majority of the human senses are not used in the teaching-learning process. To be able to use these other senses learners have to be made to partake in real life activities and make use of real things. Seeing and hearing are not as effective as partaking in real activities. This is why an ancient Chinese proverb by Confucius states '*I hear and I forget; I see and I remember; I do and I understand*' (Middletown Autism, 2024).

Every human being has the sense they learn most with, so human beings are said to be Auditory, Visual, Tactile, Gustatory, Olfactory, Vestibular or Proprioceptive learners (www.middletownautism.com). These learners learn using various sensory strategies:

S/N	Type of Learner	Sensory Strategy
1	Auditory	Hearing
2	Visual	Sight
3	Tactile	Touch
4	Gustatory	Taste
5	Olfactory	Smell
6	Vestibular	Movement
7	Proprioceptive	Body awareness

Although people learn best using various senses and sensory strategies, best when multiple senses are engaged at the same time (Wallman, 2022). Stimulating all the senses instead of just one or two of them while studying helps to improve retention. According to the Maryville University (2022), the more senses are stimulated, the better the retention of knowledge. This they say is because various senses stimulate various parts of the brain; sound affects concentration, stress and boredom while smell affects memory and cognition, and so on. For example, in a lesson on fruits the teacher should bring a real orange to the lesson instead of the picture of an orange. In doing so the students will see, smell, cut, touch, taste the orange, in addition to seeing it and hearing the explanation about it. When multiple senses are engaged in an instructional process, the various learners all benefit at the same time.

Create a Conducive Learning Environment. Creating a conducive learning environment is one of the practical strategies to employ in ensuring that our teaching achieve its desired results. When the learning environment is conducive, learners are comfortable and relaxed to assimilate and participate in the necessary activities (Uzoeshi & Iwundu, 2002). There are 2 types of learning environment we need to make conducive. There are the Physical and Social learning environment.

a. **Physical Learning Environment.** The physical environment is made up of the visible and tangible things we can see and feel. The physical environment in the learning situation has to do with visibility, temperature, noise control, space, facilities and aesthetics.

i. A lot of what goes on in the classroom has to do with the learner seeing what the teacher writes on the board, show him or what the learner writes or does on his own. All these require that our students see clearly. So, we must ensure that the classroom is bright enough for them to see. As teachers, we should be particular care to ensure that what we write on the board or show to them in form of instructional material is clear and bold enough for every member of the class to see.

ii. Noise is any loud or unpleasant sound. It is a much underestimated factor in learning but it has a lot of impact on people learning. It can prevent communication, and thereby, learning. Noise should be kept at minimum level because it causes stress on the learners.

iii. Aesthetics are important in learning. This refers to whether the learning environment is pleasing to the learners or not. This has to do with if the learners like the learning environment or not. We can effect aesthetics by doing the following:

- Ensuring the classroom is clean, neat and free of clutter
- Ensuring the classroom is airy and well decorated
- Put up inspirational posters and pictures on the wall
- Display students' work on the wall where they learn.

b. Social Learning Environment. The social learning environment in the school system has to do with the relationship that exists between the various elements in the classroom. The social environment is important for learning to take place because it ensures that the right learners, teachers, method, media and rules and regulations are put in place. The social environment that should be provided in the school system are as follows:

i. Learners should be homogenous. They should be similar in their mental and physical characteristics. In dividing students into smaller groups for class activities we should put students who have similar interests and can work together.

ii. Learners should be taught by teachers who understand and are capable of teaching students with their mental and physical characteristics. We should adjust our teaching to meet the characteristics and needs of the students

iii. Learners should be taught with the appropriate method for their characteristics. This means that we should take the learning style of the students into consideration.

iv. Learners should be taught with the media that suits their characteristics. You cannot use visuals for blind students because they cannot see.

v. The rules and regulations we put in place to guide class conduct should be those that do not stifle the children's participation and creativity in class activities. The best way to ensure that rules are obeyed is to involve the learners in the development of these rules. The success of classroom rules being followed and achieving their objectives depends on the teacher's consistency in implementing their consequences (Victor-Ishikaku, 2022).

Encourage Class Participation. Class participation is the process of involving learners actively in the learning process. It means that the learners have to contribute to the knowledge, skills and attitudes they are expected to develop in the school. Classroom teachers have a big role to play in ensuring that the learners participate actively in the classroom. Some of the ways this can be done are the following (Omieib-Davids, 2019):

- i. Motivate the learners in every way possible
- ii. Ask questions and encourage students to ask questions
- iii. Give assignments and projects that would involve the creativity of the students
- iv. Relate activities to learners' needs and level of mental and physical development
- v. Use collaborative and cooperative learning. This involves learners teaching each other
- vi. Use Constructivism. This involves students generating their own knowledge instead of the teacher giving them the information they need in class.
- vii. Create opportunities for students to apply their knowledge through presentation, discussion and role play activities.
- viii. Provide a conducive friendly learning environment
- ix. Engage learners in real life experiences.

Encourage Positive Self-Concept. Self-concept is the understanding and knowledge an individual has of his existence. It is how an individual perceives or sees himself in relation to his strength, weakness, abilities, attitudes and values. It is an individual's mental image of his personality traits, values, beliefs, strengths and weaknesses (Pradeepa, 2023; Slavin, 2000). An individual's concept of himself is developed over time. It is a relatively permanent assessment of one's knowledge and attribute. It influences what one does, ventures to do and how he relates to people and his environment. A positive self-concept will bring about a positive and healthy life style. Even when there are challenges and failures, he sees them as a passing phase that can be overcome. A negative self-concept will make an individual find life's challenges over-whelming and, at times, insurmountable.

There are various types of self-concept. Some of these are the following:

- a. Personal Self-Concept: Also known as Actual Self, this is how an individual sees himself. This could be facts or just an opinion of one's self.
- b. Social Self-Concept: This is an individual's perception of how others regard him.

c. Self-Ideals: This is an individual's perception of what he wants to be or how he wants to be seen in future.

d. Future Self-Concept: This is an individual's perception of what he would like to become, what he might become and what he is afraid of becoming. This is influenced by what the individuals presently think of themselves.

The way an individual sees himself or thinks others see him has a lot of effect on how he behaves and participates in his studies (Uzoeshi & Iwundu, 2022). An individual with positive self-concept will make effort to participate in class activities. He will ask and answer questions, partake in class discussion and activities because he has confidence in himself and knows that others expect him to do so. The individual who has negative self-concept would not make much effort to participate willingly in class work. It is such individuals that choose to sit at the back of the class and put their head on the desk when other learners are raising their hands to answer questions. Such persons are aware or have a false sense of their weaknesses or perceived weaknesses, and in most cases, are not aware or do not acknowledge any strength or potential they have. Classroom teachers have a lot to do in improving the self-concept of their students. Some ways in which this can be done are as follows:

- i. Involve learners in various activities. This will expose them to various ways of doing things that are different from what learners may be uncomfortable with.
- ii. Give learners the opportunity to do things for themselves rather than always telling them what to do and how to do it.
- iii. Give seemingly weak students opportunity to teach their peers in something they are good at.
- iv. Ask thought provoking questions that would make the learners use their intelligence (Rios, 2019).

Making Learning Fun. Learning is a process by which individuals modify and gain new knowledge, skills, understanding, values, attitudes and behaviour (Elendu, 2022). The process can be challenging and difficult for learners to stay motivated and engaged when the material feels dull and uninspiring (Kaczegowicz, 2022). This is more so for young learners who, sometimes, do not see the purpose of being asked to learn certain content and skills. Making learning fun means making learning exciting so that the students are willing to participate and find the lesson memorable (www.thepathway2success.com). It is necessary to make the learning situation and process pleasurable for our students in any way that we can. This can be done by telling jokes when necessary; using attractive colourful instructional materials; presenting novel challenges and activities that are neither too difficult nor very easy; being friendly and cheerful; taking the class out of the classroom to get real life experiences of concepts; using games, simulations and healthy competitions. Some other ways of making learning fun is by using variety of instructional methods and materials; making lesson interactive (Lorenzetti, 2011; www.miracle-recreation.com).

Integrating Technologies. The use of technologies encourages active involvement of students in the learning process (Lorenzetti, 2011). Technologies are devices or innovation that are used to solve specific problems. It is important to integrate technologies into the instructional process for various reasons. It is a way of integrating existing trends into the school system, especially with a generation of students who are digital natives. (Shibley, 2011).

The use of technology benefits practical teaching in numerous ways:

- i. It helps in the development of engaging learning experiences, especially with the use of simulated instruction.
- ii. It enables collaborative and cooperative learning which requires learners to generate, study an education content or skill and teach these to other members of a group. This could be in form of small group discussion and activities, or web collaborations.
- iii. It encourages personalised learning that focuses the sole attention on the learner, so he is compelled to engage instead of hiding under other learners in the classroom situation.
- iv. The use of learning management systems ensure that the teachers and parents can monitor when learners are working on a particular content, his progress, and so on. Thus, learners put more time into their studies.
- v. The use of technology in teaching and learning gives learners flexibility of instruction. Flexibility involves being able to use media at the pace of the learners and as many times as they want. This is what happens when digital resources, video lectures and other recordings are used in instruction.

vi. The use of technology encourages the use of innovations in the instructional process. This involves the use of flipped classrooms, collaborative techniques, etc. In using flipped classroom, the learner studies the material for the class content at home and carries out the practice of the content in the classroom (Lorenzetti, 2011; University of the People, 2022; BetterHelp, 2024).

Use of Constructivism. Constructivism, also known as the Constructivists' theory of learning, views learning as a process in which learners actively construct learning or build new ideas or concepts based upon current and past knowledge. This means that the learner is required to learn and find out information on his own but the ability to do so is to a large extent dependent on what he already knows and understands. To do this involves engagement of students in meaningful experiences as the essence of learning (Heinich, 2002; Zhang et al, 2022). Constructivism is important in integrating practical strategies for various reason. Some of these are as follows:

i. Knowledge is constructed rather than innate or passively absorbed. For the constructivists, the learner builds his own knowledge by building on the foundation of previous experiences.

ii. Learning is an active process; knowledge comes by interacting with the environment and relating the new knowledge to prior or existing experience in order to make meaning.

iii. Knowledge is socially constructed; learning is constructed by relating with other people in the environment. The environment of the individual has a huge influence on what he thinks, how he thinks and the meaning he gives to thinks he is exposed to.

iv. Knowledge is developed through collaboration among learners. Collaboration of learners means that learners of various performance levels work together in small groups towards achieving a common academic goal. The students work mutually to search for information, meaning and understanding, explore a significant question, find solution to a problem or create a meaningful product. They participate in small group activities in which they not only generate knowledge but share their expertise (Kirshner et al 2006; Scager, et al, 2016).

v. Knowledge is acquired through cooperative learning. Cooperative learning involves a heterogeneous group of learners working together to master an academic content while working together to learn collaboration and social skills (Gillies & Ashman, 2003). The main purpose of co-operative learning is to actively involve students in the learning process and make them take responsibility for their own learning. Co-operative learning focuses on constructing learning not only on the experience of individual students to construct and solidify knowledge but uses the experiences of the other members of the group and class. When students formulate their own solution to a problem by co-operation and sieving through the varying viewpoints, they are thinking critically. (Magnesio & Davis, 2010).

vi. Providing a rich learning environment, using a variety of media and technology. The environment of an individual has a lot of effect on an individual's state of preparedness to perform various functions. A child that grows up among people who are always reading or writing would naturally be ready to read and write long before his peers who do not find themselves in such environment. This is because individuals are easily influenced by what goes on around them, consciously or unconsciously. When the environment is rich, there is the tendency for learners to interact with available resources (Victor-Ishikaku, 2022).

Conclusion

Practical strategies are teaching-learning strategies that ensure that learners are actively involved in the instructional process. Some of these are Effective communication, simulate all the senses, create a conducive learning environment, encourage class participation, encourage positive self-concept, make learning fun, integrate technologies and use constructivism strategies.

References

1. Agency Report (2017). Only One-third of students who sat for JAMB scored above 200 – Official. <https://premiumtimesng.com>.
2. Alabi, M. (2021). 2021 UTME: JAMB confirm poor performance, blames COVID-19. <https://premiertimesng.com>.

3. Alcocer, Y.Y. (2024). Visual Communication: Types of images and uses. <https://study.com>
4. Amadi, R.O. (2006). Teaching Skills and General Methodology. Celwil.
5. BetterHelp Editorial Team (2024). How Does Technology and Counselling Work Hand-in-hand for Mental Health. <https://betterhelp.com>
6. Centre for Learning and Teaching (2024). Practical Active Learning Teaching Strategies. <https://www.occc.edu/pdf>.
7. Cheprasov, A. (2024). Iconic Images in Visual Storytelling. <https://study.com>
8. Dease, J.P. & White, D. (2023). Verbal and Non-verbal Communication: Definition, Skills and Examples. <https://study.com>
9. Denome, D.; Manker, A.D. & Scalia, S. (2023). Written Communication: definition, Types and Examples. <https://study.com>
10. Duckett, I. & Tatarowski, M. (2009). Practical strategies for learning and teaching on vocational programmes. Learning and Skill Development.
11. Elendu, G. (2022). The Best Ways to Make Learning Fun for Students. Gradely. <https://gradely.ng>
12. Forsyth, I.; Jolliffe, A & Stevens, D. (1999). Delivering a course: Practical strategies for teachers, lecturers and trainers. Routledge.
13. Gillies, R.M. & Ashman, A.F. (2003). Cooperative Learning: The Social and Intellectual Outcome of Learning in Groups. Routledge Falmer.
14. Heinich, R. ; Molenda, M.; Russel, J.D. and Smaldino, S.E. (2002). *Instructional media and technologies (12thed)*. Merrill Prentice Hall.
15. Kaczegowicz, C. (2023). From Boring to Exciting: 10 ways to make learning fun. <https://medium.com>.
16. Kirschner, P. A.; Sweller, J. & Clark, R. E. (2010). "Why Minimal Guidance During Instruction Does Not Work: An Analysis of the Failure of Constructivist, Discovery, Problem-Based, Experiential, and Inquiry-Based Teaching". *Educational Psychologist*. 41 (2): 75–86. <https://doi.org/10.1207/s15326985ep4102-1>
17. Lorenzetti, J.P (2011). 23 Practical Strategies to Help New Teachers Thrive. Magma
18. Magnesi, S. & Davis, B.A. (2010). A Novice Teacher Fosters Social Competence with Cooperative Learning. *Childhood Education*. 86(4) Summer, 2010.
19. Maryville University (2022). The importance of the 5 senses in learning and studying. <https://online.maryville.edu>.
20. Middletown Autism (2024). Sensory Strategies. <https://middletownautism.com>.
21. Olamide, I. (2023). JAMB Statistics 2023 is Out (See Overall performance). <https://witspot.org.ng>.
22. Omieibi-Davids, I. (2019). Skills in Effective Teaching. Noni.
23. Omieibi-Davids, I. (2021). Educational Technology for Trainee Teachers. Noni.
24. Osayande, E. (2021). Mass failure in 2021 UTME: Stakeholders, JAMB trade blame. <https://vanguardngr.com>
25. Pathak, S. (2023). Top 8 practical approach in teaching for teachers. <https://classplusapp.com>growth>.
26. Pavlovic, J. (2023). Verbal Communication Explained – Definition and Examples. <https://pumble.com>.
27. Pradeepa, S. (2023). Types of Self-Concept: 3 concepts that shape your identity. <https://www.believeinmind.com>.
28. Rastogi, S. (2022). Practical teaching approach for teachers. <https://blog.teachmint.com>.
29. Rios, S. (2019). 10 practical approaches to teaching. <https://www.facultyfocus.com>.

30. Scager, K. Boonstra, J. & Wiegant, F. (2016). Collaborative Learning In Higher Education: Evolving positive independence. www.ncbi.nlm.nih.gov/pmc/articles/PMC5000000/. *HigCBE Life Science Education*. Winter 2016, 15(4) <https://doi.org/10.1187/cbe.16-07-0219>.
31. Sert, Z.S & Panieri, G. (2023). Functions of the senses in learning. *Septentrio Educational*. <https://researchgate.net>.
32. Shibley, I.A. (2011). 23 practical strategies to help new teachers thrive. Magna.
33. Slideshare (2013). UTME-2013-performance-analysis. <https://slideshare.net>.
34. Sweller, J. (2011). "Cognitive Load Theory and E-Learning. In Biswas, G., Bull, S., Kay, J. & Mitrovic, A (eds) Artificial Intelligence in Education. AIED 2011. Lecture Notes in Computer Science, 6738, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-21869-9_3.
35. The Pathway2Success (2021). 20 plus Ways to Make Learning Fun. <https://www.thepathway2success.com>.
36. Tolu-Kolawole, D. (2022). 2022 UTME: Only 378,639 scored above 200 – JAMB. <https://punchng.com>.
37. University of the People (2022). The Pivotal Role of Technology in Education. <https://uopeople.edu>.
38. UTME Official (2024). 2024 UTME: JAMB cumulative performance statistics revealed. <https://utmeofficial.com.ng>.
39. Uzoeshi, K.C. (2002). Guidance and Counselling: Foundations and Practice. Harey.
40. Uzoeshi, K.C. & Iwundu, C.O. (2002). Psychology of Learning. Harey.
41. Victor-Ishikaku, E.C. (2022). Microteaching Guide for Trainee Teachers. Calebst.
42. Wallman, M. (2022). How to manipulate the five senses in your classroom. <https://himama.com>.
43. Wortman, R. (1988). Using All the Senses to Learn. <https://www.sd43.bc.ca>.
44. Zhang, M.J.; Croiset, E. & Ioannidis, M. (2022). Constructivist-based Experimental Learning: A case study of student-centred and design-centric unit operation distillation laboratory. *Education for Chemical Engineers*. 41, 22-31. <https://doi.org/10.1016/j.ece.2022.09.002>.
45. www.miracle-creation.com (n.d.). How to Make School and Learning Fun. <https://www.miracle-creation.com>.