Teachers' Awareness and Utilization of Creative Pedagogies in Improving Secondary Students' Performance in Public Secondary Schools in Anambra State, Nigeria

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Abstract
The learning process varies for each individual, resulting in students being classified based on their cognitive abilities. Every category of learners is entitled to inclusive and equitable education. Creative pedagogies are innovative teaching techniques, used to enhance inclusivity and foster student engagement during instruction. This study explored teachers' awareness and use of creative pedagogies to improve students' performance in secondary schools. The study population consisted of 7,188 teachers from public secondary schools in Anambra State, Nigeria. Using a multistage sampling technique, 600 teachers were selected as participants. Data were collected using the Creative Pedagogy Awareness and Utilization Questionnaire (CPAUQ), validated by three experts. The reliability of the instrument was confirmed through Cronbach's Alpha, yielding a coefficient of 0.86. The data was analyzed using mean responses. Findings revealed a significant gap in teachers' awareness and implementation of creative teaching methods, emphasizing the need for policy reforms, targeted professional development, and adequate resource provision to support creative approaches in Nigeria education.
Keywords: creativity, pedagogy, utilization, awareness, technology, challenges

Introduction

Creative pedagogies are techniques teachers use to bring creativity to students' learning process and address diverse learning needs. It involves tested and proven innovative strategies that enhance students' interest and commitment to learning. The process of learning is different for each individual, and that is why some students can give apt attention during class instructional delivery and comprehend new knowledge easily, while others struggle. These differences in learning among students are not an excuse for teachers to fail in producing positive learning outcomes, rather it should be a motivator for teachers to employ

diverse strategies to ensure that every student benefits from the learning process through selecting appropriate pedagogical methods.

The learning process is shaped by six core components: memory, attention, language, organization, processing, writing, and thinking (Montelli *et al*, 2023). These elements interact dynamically, each contributing to the overall process of learning, and they require teaching approaches that integrate all six for effective knowledge acquisition. Creative pedagogy is a teaching method that incorporates these elements, working to activate memory, sustain attention, broaden communication skills, organize knowledge, and ultimately help students comprehend and apply new information. Cremin and Chapplin (2019) reviewed 35 studies and identified common features of creative pedagogies that formed the foundation of creative teaching. They are: generating and exploring ideas, encouraging autonomy, playfulness, problem-solving; risk-taking, co-constructing, collaborating and teachers' creativity. Each of these features enhances the learning experience, fostering an environment where students can think critically and engage deeply.

Some of the creative teaching methods that exhibit these features are dialogic pedagogy, differentiation, collaboration, planned scaffolding, demonstration, and technology-assisted learning among others, are known for their effectiveness in enhancing students' interest and commitment to learning.

Scaffolding is an innovative and creative pedagogy that involves giving support to students as they learn new concepts or skills (Taber, 2019). Just like what scaffold does in building construction in providing support and access to unsafe areas. In education, the teacher uses scaffolds to help students understand difficult and complex concepts and gradually withdraws and observes the students practice on their own. Teachers offer scaffold by providing hints, clues, clarifications, explanations, questioning, and modeling (Van de Pol *et al*, 2010). Piamsai (2020) carried out a study to find out the effect of scaffolding on non-proficient EFL (English as a Foreign Language) learners' performance in

academic writing. Findings reveal improvement in the post-test scores in all aspects of writing competence. This proves that scaffolding improves student engagement and enhances information retention (Grand Canyon University, 2023).

Discussions on scaffolding would not be complete without mentioning the contributions of Vygotsky and his social development theory. The theory asserts that a child's cognitive development and learning ability can be guided and mediated by a more knowledgeable person through providing hints and prompts, the child understands the concept and solves the problem at hand (Vygotsky as cited in Veer, 2020). In addition, a student's cognitive develops faster and performs better when they are guided through a task rather than doing it alone. The guide serves as a mediator between the learners and the task (Sarmiento-Campos *et al*, 2022). Another good thing about scaffolding is that it is learners centric and leads to increased student performance. A teacher using scaffolding approach offers support to students by demonstration or experimentation and gradually steps back and allow the students try it alone. Scaffolding boosts student eagerness to learn, minimizes frustration, and increases communication between students and teachers (Grand Canyon University, 2023).

Another creative approach is dialogic pedagogy. It involves the use of dialogue to make lessons more interactive and engaging, it uses the potency of classroom discussions to challenge and stretch students thinking and help their cognitive and social development (Egan-Simon, 2018). This technique helps students develop core skills of listening; responding to others, forming questions, evaluating ideas, reasoning, and justifying opinions (Kazepides, 2012). The dialogic approach has been found to increase attention and improve student outcomes (Spalding, 2023; Nouri *et al*, 2018).

In differentiation approach, teachers tailor instructions to meet individual needs and uses different learning modalities to suit all the students. They differentiate in learning content, process and output (Tomlinson, 2000). This

approach works wonders with diverse learning groups especially students with disabilities. With differentiation method every student's needs is taken into consideration.

Collaborative teaching is another creative instructional strategy in which learners at diverse levels of abilities are paired together to complete a task (Laal and Laal, 2011). This strategy provides opportunities for students to take charge of their own learning through cooperation with each other. The key elements in collaboration are interdependence (students depend on each other,) substantial interaction, accountability, social skills and group processing (Laal and Laal, 2011). A study on the effect of collaborative teaching method on students' academic achievement in Business studies reveals that students exposed to collaborative teaching had a better mean difference compared to those exposed to lecture method, implying that the collaborative teaching method has a positive effect on the mean academic achievement of students (Adeoye, 2018).

Demonstration strategy involves giving a demo or show to help students understand the concepts being taught (Yousafzai, 2023). It requires students' active participation, use of props, and teachers' ability to ask questions. The approach benefits students by improving their understanding, engaging them, and leading to permanent learning. It is an effective way to teach because it makes it easier for students to understand complicated ideas (Yousafzai, 2023). To ascertain the effectiveness of the demonstration approach in teaching, Narayanan (2011) investigated the effectiveness of the demonstration approach in teaching the physiology of the vestibular apparatus to undergraduate medical students. The students were engaged on role-play sessions in a didactic lecture. The effectiveness of the sessions was later evaluated and findings revealed that the post-test scores of the students were significantly higher than the pre-test scores indicating that the demonstration method was effective in enhancing the students' learning in the class.

The flipped classroom is another creative teaching strategy. It minimizes teachers' direct instruction and maximizes students' cooperation and collaboration (Sams and Bergmann, 2013). In a flipped classroom students learn online through prerecorded instructional videos or Google Classroom and carry out assignments and class work in the classroom (Schmidt & Ralph, 2016). They also have lots of opportunities to ask questions on what they learnt online and discuss them in class. The role of the teacher in flipped classroom is to facilitate learning, guide, provide timely feedback and select learning content with varieties of tools for students to work with (Sakulprasertsri, 2017). To impress the importance of flipped classroom, Khayat *et al* (2021) carried out a study to compare the effectiveness of flipped classroom and traditional teaching method on students' self-determination. Findings revealed that the flipped approach increases learners' understanding of concepts more than the traditional approach.

The technology-assisted learning approach uses computers, projectors, printers, make learning engaging and interesting (Swanzy-Impraim *et al*, 2023). The European Commission (2023) recognized digital competencies as one of eight key core competencies for life-long learning. One might wonder why digital competence is essential. It provides a means of developing innovative teaching and student-centered learning (Skov, 2016). Digital or computer knowledge is equivalent to knowing how to read, write, and do arithmetic; teachers need it to enhance teaching and students need it to remain active in class (Okeke, 2021). Hence the need for teachers to be aware of the effectiveness of these tools and how to integrate them into teaching. A study by Okeke (2020) assessed teachers' level of basic computer skills in model primary schools in Rivers State and findings revealed fair competence in word processors, databases, and the internet. On the other hand, teachers lacked competencies in Excel and presentation skills. This shows the unpreparedness of most teachers in integrating creativity into teaching and learning.

That notwithstanding, practitioners have identified some impediments to the effective implementation of creative pedagogies in classrooms (Gibbs, 2023). For instance, in the implementation of differentiated teaching, teachers observed that it was affected by limited resources, limited time, large class size and unruly behaviors among students (Gibbs, 2023). Boruah (2024) equally identified lack of funds to facilitate innovative pedagogies; lack of moral support from fellow teachers, teacher's negative attitude towards it and institutional resistance. In addition, some teachers failed to acknowledge the need for creativity in teaching methods and as a result refuse to try them (Boruah, 2024). Despite the challenges, creative pedagogies have been proved to be effective in enhancing students' interest and commitment to the learning process.

The Nigerian Education Policy in its policy statement identified education as an instrument in the acquisition of appropriate creative skills in students, however, the high rate of unemployable school leavers makes one believe that the education given did not develop their thinking faculty nor were they equipped with problem-solving skills (FRN, 2004). It is therefore disheartening to know that creative teaching is highly underutilized in the Nigerian educational system. Nwafor and Nworgu (2016) also agreed that creative teaching is conspicuously absent in most schools in Nigeria, because the educational planners and policymakers have not given creativity in education the needed attention, both in curriculum development and policy initiatives. Another researcher supported the discourse by emphasizing that the effective development of creativity in learners is shaped by a teacher's understanding of creativity as a concept and a process, and their use of creative pedagogies in practice (Tan, 2017). Interest in the study was triggered by the quality of education offered in some public secondary schools in Anambra state. Most teachers still utilize the traditional method of instructional delivery despite the Federal government policy statement on creative education. Tan (2017) argues that for teachers to perform policy initiatives, they must make sense of it, influence it, negotiate it and support it.

Statement of Problem

The learning process is different for each individual and as a result, students are classified according to their cognitive abilities, slow and fast learners. Each category has the right to inclusive and equitable education. These differences have made teaching burdensome for teachers and have hindered them from including all the students in the learning process. This is unacceptable especially when there are innovative pedagogies that are highly inclusive. This study was undertaken to investigate teachers' awareness and utilization of creative pedagogies in public secondary schools in Anambra State. The need for this study is to expose teachers to various innovative teaching skills that will cater for the diverse learning needs of students.

Purpose of the study

The purpose of this study was to find out teachers' level of awareness and utilization of creative pedagogies in teaching and learning in public secondary schools in Anambra State. Specifically, the study intends to find out:

1. The extent of teachers' awareness of creative pedagogies in Public secondary schools in Anambra State.
2. The extent of teachers' utilization of creative pedagogies in teaching and learning in Public secondary schools in Anambra State.
3. The challenges facing the effective utilization of creative pedagogies in Public secondary schools in Anambra State.

Research questions

The following research questions guided the study.

1. What is the extent of teachers' awareness of creative pedagogies in Public secondary schools in Anambra State?
2. What is the extent of teachers' utilization of creative pedagogies in teaching and learning in Public secondary schools in Anambra State?
3. What challenges affect the effective utilization of creative pedagogies in Public secondary schools in Anambra State?

Method

The descriptive survey design was used in the study to collect information from respondents without manipulating the variables. The population was 7188 teachers. The Multi-stage sampling technique was used to divide the population into 6 educational zones. The simple random sampling technique was used to select 3 educational zones. In the second stage, simple random sampling was again used to select 4 secondary schools from each of the 3 zones and all the teachers in the selected schools were sampled. Hence, a sample size of 600 teachers were used for the study. Data was collected using creative awareness and utilization questionnaire. The instrument was validated by 3 specialist in Education and Cronbach alpha was used to test for internal consistency of the instrument and a reliability coefficient of 0.86 was obtained. Collected data were analyzed using mean response.

Results

Table 1: Teachers Responses on the Awareness of Creative Pedagogies in Teaching

N /S	ITEMS ON CREATIVE PEDAGOGIES	VHE 4	HE 3	LE 2	VLE 1	Mean	Rmks
1	I am aware of collaboration strategy	150 600	100 300	150 300	200 200	2.3	LE
2	I am aware of scaffolding technique	10 40	40 120	200 400	350 350	1.51	VLE
3	I am aware of differentiation teaching method	100 400	100 300	200 400	200 200	2.16	LE
4	I am aware of ICT in teaching	250 1000	200 600	100 200	50 50	3.08	HE
5	I am aware of flipped classroom	50 200	50 150	200 400	300 300	1.75	VLE
6	I am aware of dialogic approach	200 800	100 300	200 400	100 100	2.66	HE
7	I am aware of demonstration strategy	200 800	200 600	100 200	100 100	2.83	HE
	Grand mean					2.18	LE

Sample size=600

From Table 1 data reveals that teachers are aware of ICT in learning, dialogic approach and demonstration teaching strategies. On the other hand, they have no knowledge of collaborative learning, scaffolding, differentiation and

flipped classroom. The grand mean of 2.18 shows that teachers' awareness of creative pedagogies was to a low extent.

Table 2: Teachers Responses on the Utilization of Creative Pedagogies in Teaching

s/n	ITEMS	VHE 4	HE 3	LE 2	VLE 1	Mean	Remarks
8	I use collaborative strategies in teaching	50 200	100 300	400 800	50 50	2.25	LE
9	I use scaffolding to support students' learning	50 200	50 150	100 200	400 400	1.58	LE
10	I use differentiation strategies to make all students learn	150 600	200 600	150 300	100 100	2.66	HE
11	I use ICT in teaching and learning	0 0	0 0	100 200	500 500	1.16	VLE
12	I use flipped classroom to engage all student	100 400	200 600	150 300	150 150	2.41	LE
13	I use dialogic approach to make my teaching interactive	300 1200	100 300	150 300	50 50	3.08	HE
14	I use demonstration method to teach	200 800	100 300	100 200	200 200	2.5	LE
	Grand Mean					2.23	LE

Sample size=600

Table 2 indicates that teachers use differentiation and dialogic strategies to teach students, on the other hand they fail to use collaboration, scaffolding, ICT and flipped classroom to teach and learn in schools. A grand mean of 2.23 indicates that teachers' utilization of creative pedagogies was to a low extent.

Table 3: Teachers responses on challenges affecting effective utilization of creative pedagogies

s/n	ITEMS	VHE 4	HE 3	LE 2	VLE 1	Mean	Remarks
15	Teachers' negative attitudes towards creative pedagogies	340 1360	160 480	45 90	55 55	3.30	HE
16	Lack of support from management	100 400	150 450	200 400	150 150	2.33	LE
17	Lack of funds to facilitate creative pedagogies	170 680	150 450	140 280	140 140	2.58	LE
18	Limited time to implement creative pedagogies	165 660	260 780	80 160	95 95	2.82	HE
19	Inability to manage the classroom during teaching with innovative strategies	290 1160	150 450	90 180	70 70	3.1	HE
20	Lack of support from colleagues	180 720	120 360	150 300	150 150	2.55	LE

21	Lack of competence to use creative pedagogies	140 560	150 450	170 340	140 140	2.48	LE
	Grand mean					2.73	HE

Sample size=600

Table 3 revealed that all the items are challenges affecting effective utilization of creative pedagogies in secondary schools in Anambra State except item16 "lack of support from management" and item 2 "lack of competence to use creative pedagogies". The grand mean of 2.73 indicates the presence of these challenges.

Discussion

The low awareness of teachers on creative pedagogies as revealed by the study in Table 1 could be as a result of the principals' poor instructional leadership quality. The school principals are to create awareness by modeling creative teaching techniques for teachers to emulate, but when they fail to do so, teachers have no option than to rely on the existing traditional methods. The low awareness led to low utilization. You can only use what you are aware of. This finding agree with the observations of Nwafor and Nworgu (2016), who noted that creativity is conspicuously absent in Nigeria education because educational planners have not given creativity in education the needed attention.

Table 2 revealed that teachers use differentiation and dialogic strategies to teach students, on the other hand, they failed to use collaboration, scaffolding, ICT, and flipped classrooms to teach and learn in schools. Dialogic approach and differentiation teaching approaches have been found to increase attention and improve student outcomes (Spalding, 2023; Nouri *et al*, 2018). However, collaborative teaching could have failed due to students' unwillingness to collaborate, and poor time distribution could also affect the effective use of the scaffolding technique. Nevertheless, Boruah (2024) noted that teachers' failure to acknowledge the need for creativity in teaching methods could be a major reason for their refusal to try them. Creative skills does not fall from the sky it must be developed using creative pedagogies. The resultant effect of this

negligence is the migration of many Nigerian students to other countries for qualitative secondary education.

Table 3 identified challenges affecting the effective utilization of creative pedagogies in secondary schools in Anambra State as teachers' negative attitudes towards creative pedagogies; lack of funds to facilitate creative pedagogies; and lack of competence to use creative pedagogies. These findings are in agreement with the findings of Gibbs, (2023) and Boruah (2024) who identified a lack of funds to facilitate innovative pedagogies; a lack of moral support from fellow teachers, teacher's negative attitude towards creative pedagogies and institutional resistance as challenges facing the implementation of creative pedagogies by teachers. The study's findings suggest that adopting creative pedagogies in Nigerian schools could enhance students' critical thinking, and problem-solving skills, fostering an environment where all students, regardless of cognitive ability, can thrive. It should be a springboard on which teachers can create an interactive classroom, bringing life and vigor into the teaching process.

This study is significant because it has identified creative learning strategies employed across borders that Nigerian teachers can leverage to enhance teaching and learning in their various schools. It is believed that the acquisition of these strategies will foster creativity in students, teachers, and educators. It will also help them have a paradigm shift from what they believed to be good teaching methods to novel creative pedagogical strategies that could transform and revolutionize students' learning. The study relied on quantitative data which may not capture the subjective experiences of teachers and might introduce bias in the findings. Future study could include qualitative data for a more in-depth analysis.

Conclusion

Despite the effectiveness of creative pedagogies in engaging students and increasing their academic performance, teachers in Anambra State are not aware of some of them and rarely utilize them. The lack of awareness and utilization have posed a big challenge to teachers and school managers. It therefore behooves

them to see how they can navigate through the identified challenges to become more novel in their teaching approaches. Traditional teaching methods are no longer sufficient to engage students in a globalized and digital world. Hence, the need for more robust teaching strategies that will take into account the needs of each student and make them become active learners.

Recommendations

The study recommends that:

1. School leaders prioritize incorporating innovative teaching strategies into training programs to equip teachers with the skills and resources required to implement creative pedagogies effectively.

2. Frequent campaigns should be carried out by principals and their teams on the effectiveness of creative pedagogies in teaching. They should give rewards to teachers who constantly utilize those strategies as a way of encouraging them. Emphasis should be placed on creativity across curriculum. This will help to impress the importance on the teachers.

3. Finally, teachers should carefully select learning tasks that will activate creativity in students.

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