E-ISSN: 1116 - 3240 P-ISSN: 3026-9334
MPRI-JAIMR | INTERNATIONAL JOURNAL OF AFRICAN INNOVATION & MULTIDSCIPLINARY RES.
VOL. 12 NO. 2 – APRIL, 2026

EFFECTS OF SCAFFOLDING TEACHING STRATEGY ON ACADEMIC ACHIEVEMENT OF PUPILS WITH ATTENTION-DEFICIT HYPERACTIVITY DISORDER IN BAUCHI STATE, NIGERIA

NASIRU NUHU GARKUWA; PROFESSOR JACOB OMEDE; & PROFESSOR MARY P. HAGGY

Department of Educational Foundations, Faculty of Education, University of Jos, Plateau State
Corresponding Author: garkuwan@gmail.com
DOI: https://doi.org/10.70382/mejaimr.v12i2.0116

Abstract

The study investigated the effects of scaffolding teaching strategy on academic achievement of pupils with attention-deficit hyperactivity disorder in Bauchi State, Nigeria Two research questions guided the study. The study made use of quasi experimental research design**.** The sample of 15 respondents was drawn from primary five pupils in Azare Metropolis Bauchi State. Purposive sampling technique was used in the study. ADHD diagnostic rating scale was used to screen those who qualified for the study. English achievement test was used as an instrument for data collection, and it has a reliability coefficient of . , the instrument has twenty (20) items it was used to generate data for the study. Descriptive Statistic (Mean and standard deviation) and Inferential Statistic (ANCOVA) was used to analyse the data generated for the study. The study found out that pupils with ADHD had low academic achievement before exposure to the scaffolding teaching strategy, but those in the experimental group later increased due to exposure to scaffolding strategy. Experimental and control groups differed significantly in terms of academic achievement ($F(1, 12) = 59.12$, $p < .05$. Scaffolding Teaching Strategy did not affect the academic achievement of both the male and female primary 5 pupils with ADHD differently, $t(5) = -1.72$, $p > 0.05$. The study recommend among other scaffolding is an effective method of teaching at elementary

Keywords:
Scaffolding**,** Academic Achievement, ADHD, Primary five pupils

EDITOR-IN-CHIEF
Prof. A.I. Mteiye [MALAWI]

stage, that activity based teaching strategy should be adopted by teachers in their lesson, students take up or use the scaffolding. Finally, teachers need to conceptualize their role as facilitators in the development of pupils.

Introduction

Behavioural disorders make children and adults experience difficulties in learning that could negatively affect the academic achievement. Some behavioural disorders include Oppositional Defiant Disorder (ODD), Conduct Disorder (CD), Autism Spectrum Disorder (ASD), Emotional Disturbances (ED) and Attention-Deficit Hyperactivity Disorder (ADHD) among others. This disorder, can manifest as: primarily inattentive, primarily impulsive hyperactive, or it can be a combination of both inattention and impulsive hyperactive behaviours.

Although, children with ADHD fall behind their peers academically (Barbaresi, Colligan,Weaver & Voigt, 2018). Most studies like Unni, Deshpande and Srivastava (2022) ; Nazarova, Sokolov, Chubarev, Tarasov and Schioth (2022) have focused on treating the behavioural symptoms (that is inattention, impulsivity and over-activity) rather than the associated academic problems. Attention-deficit is a persistent and frequent pattern of developmentally inappropriate, inattentive and impulsive behaviour with or without hyperactivity. Hyperactivity, on the other hand, is a term used to describe behaviours that are considered to be excessive for children's age, it is marked by like jumping from seat to seat in the classroom, talking excessively and climbing chairs and desks, among others. The disadvantages of this form of behaviour are two; the serene classroom environment will be disturbed and also the child with the disorder and other children without the disorder will be distracted and will no longer be able to concentrate on what is being taught in the classroom. ADHD is a disorder involving inattentiveness and hyperactive-impulsivity. Each of these two components of the disorder is defined in terms of several behavioural criteria. Inattentiveness is characterized by such behaviours as carelessness, forgetfulness in daily activities, and other attention problems. Inattentive children commonly lose their belongings, are easily distracted, cannot follow through on instructions, and have difficulty organizing tasks. The hyperactive-impulsive component is further divided into the subtypes of hyperactivity and impulsivity. Hyperactivity is characterized by fidgeting, restlessness, running about inappropriately, difficulty in playing quietly, and talking excessively. Impulsivity manifest in the form of blurting out answers, cannot wait for turn is speak and interruption of others. Pupils can be diagnosed as having ADHD when they exhibit predominant characteristics of inattentiveness, hyperactive-impulsivity, or a combination of the two. The recognition that a child has ADHD usually occurs fairly early in the child's life, prior to school age. Children with ADHD are usually regarded as "difficult" by their parents, relatives, and friends. The disorder,

EDITOR-IN-CHIEF
Prof. A.I. Mteiye [MALAWI]

coupled with poor pedagogical practices can make ADHD pupils find the classroom very frustrating. Therefore, the use of the right teaching strategy could be important because it could determine, to a large extent, learners' interest, participation in the learning process and academic achievement. The academic achievements of learners are highly dependent on the teaching strategy which the teacher uses during an instructional process. Hence, there is a need to have the right teaching strategy for pupils with ADHD. ADHD among children is not gender bias or related, because children with ADHD characteristics are both males and females. Examining gender roles in studies in Education and other related disciplines is gaining ascendancy and attention, particularly because the global practices and system emphasise the education of both the boy and the girl-child. It will, therefore, be necessary to find out the role of gender in the academic engagement and achievement of ADHD pupils exposed to specialized teaching strategy in Bauchi State, Academic achievement refers to the performance outcome which shows the extent to which an individual has accomplished specific goals that were the focus of activities in instructional environments. Academic achievement is considered a multifaceted construct that comprises different domains of learning. The definition of academic achievement depends on the indicators used to measure it. Among the many criteria that indicate academic achievement, there are very general indicators such as procedural and declarative knowledge acquired in an educational system, more curricular-based criteria are grades or performance, an educational achievement test. others are cumulative indicators such as educational degrees and certificates. All that these criteria have in common are that they represent intellectual endeavours and so mirror the intellectual capacity of a person. Thus, students with ADHD receive lower grades than their non-ADHD peers, they are more likely to withdraw from classes, have poorer study habits, and experience difficulty completing tests and assignments on time, engage in fewer study skills strategies, make slower progress in their programmes, and receive lower Grade Point Average. poor teaching strategy by the teacher who has pupils with ADHD in the classroom is some time a contributing factor to their poor academic achievement. Using the conventional method to teach may only be of minimal help. Conventional method refers to the type of teaching method in which the teacher is the principal actor while the learners watch with the intention to act later. It is a strategy characterized by pupils listening to lessons and memorizing what the teacher teaches. Although the conventional teaching strategy has been frequently employed in teaching students will perform better when they are actively involved in the learning process, this has led researchers to seek alternative teaching strategies, beginning with the conventional strategy to a variety of experimental strategies and other forms of active learning. Studies have shown that learners perform better when they participate actively in the learning process, when they are allowed to ask questions and participate fully in the learning process, make mistakes

and correct the mistakes themselves in view of the new information they discovered. This process of teaching is participatory through social interaction, togetherness and action-oriented communication. Some common innovative strategies that are engaging and effective in teaching children with ADHD include and scaffolding.

Academic achievement in English language could be seen as the level of proficiency and success a student demonstrates in English language skills, including: reading comprehension, writing skills, speaking skills. Academic achievement in English is often measured through: grades and scores, proficiency levels, progress and improvement.

Scaffolding is one of the teaching strategies that are activity-based and learner-centered. Instructional scaffolding provides sufficient support to promote learning when concepts and skills are being first introduced to students. These supports may include resource, compelling task, templates and guides, and/or guidance on the development of cognitive and social skills. Instructional scaffolding could be employed through modeling a task, giving advice, and/or providing coaching. The support and guidance provided to the learner is compared to the scaffolds in building construction where the scaffolds provide both "adjustable and temporal" support to the building under construction.

The support and guidance provided to learners in scaffolding facilitate internalization of the knowledge needed to complete task. These supports are gradually removed as learners develop autonomous learning strategies, thus promoting their own cognitive, affective and psychomotor learning skills and knowledge. Teachers help learners master a task or a concept by providing support. The support provided can take many forms such as outlines, recommended documents, storyboards, or key questions. Scaffolding teaching strategy is an assistive method that can be used with learners with developmental difficulties such as ADHD. This study seeks to determine effects of scaffolding teaching strategy on academic engagement and achievement of primary school pupils.

STATEMENT OF THE PROBLEM

Children with Attention Deficit Hyperactivity Disorder (ADHD) have difficulties learning effectively in Schools. This is principally due to their hyperactivity and impulsivity that make them to be inattentive to the teacher when lessons are going on. Children with ADHD find it difficult to pay attention for long period. Their behaviours are characterized by jumping from seat to seats and losing concentrations that could make them to make sense out of what is being taught. Also, they earn low grades than their counterparts without ADHD. They develop poor study habits, experience difficulties in completing task, make slow progress in school, and are likely to dropout of school. ADHD as a behavioural problem could have negative impact on the cognitive, social and personality development of children which can negatively impact learning outcome. If children are the "future

leaders", then children with ADHD would need to be assisted to learn and develop effectively and qualitatively in order to be useful to themselves and the society at large. Stakeholders in education such as parents, teachers and government are aware and sensitive to the plight of these categories of children and have been putting up efforts to see how they could be helped. Some of such efforts include the use of discipline and punishment to curb restive behaviours in the classroom, at home and in other public places. Some parents and teachers also sometimes use persuasion, coercion and force to curb restlessness and inattentiveness. Despite these measures, ADHD traits and behaviours among these children still persist. Special schools have also established by government in Bauchi and Katagum education zones to assist children with learning disorders to overcome their learning difficulties for better academic engagement and achievements. Only a few Pupils with disabilities who are beneficiaries of the programme. The Educational system in Bauchi state is an inclusive education where children with learning disorder are mainstreamed into the regular educational system. Children with ADHD are found in regular classes and schools where teachers use conventional method of teaching in lesson delivery. One of the ways they could be assisted to learn effectively and qualitatively could be through the use of Scaffolding Teaching Strategy. Thus, this study examines effect STS on the academic engagement and achievement of pupils with ADHD in Azare metropolis, Bauchi State Nigeria.

AIM AND OBJECTIVES OF THE STUDY

The aim of this study is to examine the effects of scaffolding teaching strategy on Academic achievement of pupils with Attention-deficit Hyperactivity Disorder in Azare Metropolis, Bauchi state, Nigeria. The specific objectives are to:

1) determine the effects of Scaffolding Teaching Strategy on academic achievement of primary 5 pupils with ADHD.
2) determine the effects of Scaffolding Teaching Strategy on Academic achievement of primary 5 pupils with ADHD based on gender.

RESEARCH QUESTIONS

The following research questions are asked to guide the study:

1) What are the pretest and posttest academic achievement mean scores of primary 5 pupils with ADHD in the experimental and control groups?
2) What are the pretest and posttest academic achievement mean scores of primary 5 pupils with ADHD in the experimental group based on Gender?

HYPOTHESES

The following null hypotheses are formulated to guide the study and will be tested at 0.05 level of significance.

EDITOR-IN-CHIEF
Prof. A.I. Mteiye [MALAWI]

i. There is no significant difference between the pre-test and posttest academic achievement mean scores of primary 5 pupils with ADHD in the experimental and control groups.
ii. There is no significant difference in the pre-test and posttest Academic achievement mean scores of primary 5 pupils with ADHD in the experimental group based on gender.

ACADEMIC ACHIEVEMENT

Academic achievement is the extent to which individuals attain school success academically. When people hear the term "academic achievement" they often think of a person GPA. However, several factors indicate a student's academic success. Students' academic achievement is monitored closely so as to identify early any student whose performance is likely to lead to academic failure. Academic performance represents performance outcomes to which a person has accomplished specific goals that were the focus of activities in instructional environments specifically in school, college and University.

Academic achievement is frequently defined in terms of examination performance. Therefore academic achievement is the extent to which an individual achieve educational goal. Academic achievement is commonly measured through examinations or continuous assessments but there is no general agreement on how it is best evaluated or which aspects are most important procedural knowledge such as skills or declarative knowledge such as fact. Furthermore, there are inconclusive results over which individual factors successfully predict academic performance, element such as test anxiety, environment, motivation and emotions require consideration when developing models of school achievement. Academic achievement is measured in relation to what is attained at the end of a course, since it is the accomplishment of medium or long term objective of education, what is important is that the test should be a standard test to meet national norms for a test to be standardized, it must be valid for over a period of time (Jabir & Farooq, 2022).

GENDER AND ACADEMIC ACHIEVEMENT

Different efforts were made by various government and agencies in order to do away with the disparity between male and female in all spheres of life be it education employment to mention but a few, in order to ensure gender equality but still there is a serious gap between boys and girls in academic performance and achievement. There are very limited studies focused on the issues of gender difference in academic achievement of students (Attah and Ita, 2017).

Gender is a specially constructed phenomenon that is brought about as society ascribes different roles, duties, behaviours, and mannerisms to the two sexes, (Nnamani and

Oyibe, 2016). It is a social connotation that has sound psychological background, and it is used to refer to specific cultural patterns of behaviour that are attributed to human sexes. Gender relates to cultural attributes of both males and females. Gender is a psychological experience of being a male or female. It has to do with personality and central components of self-concept. Unlike sex, which is concerned with, only the distinction between male and female based on biological characteristics, gender encompasses other personality attributes as roles, orientation and identity based on individual's conceptualization of self. For instance, Singh opines that gender refers to a socio-cultural construct that connotes the differentiated roles and responsibilities of men and women in a particular society. This definition implies that gender determines the role, which one plays in relation to general political, cultural, social and economic system of the society. According to Betiku (2002), gender refers to all the characteristics of male and female, which a particular society has determined and assigned each sex. Also, In most societies, gender has roles based on the women folk, preventing their participating in, and benefiting from development efforts (UNESCO, 2000). This has created a big psychological alienation or depression in the minds of the female students. As a result, boys dominate Social Studies, Chemistry, Physics, Mathematics and Environmental studies classes while the girls go into reading languages and Arts (Nnamani and Oyibe, 2016).

SCAFFOLDING TEACHING STRATEGY

Scaffolding is an instructional method that progressively moves students toward greater independence and understanding during the learning process. Scaffolding refers to the steps taken to reduce the degrees of freedom taken in carrying out some task so that students can concentrate on the difficult skill he/she is in the process of acquiring. Instructional scaffolding as a strategy for supporting learners, scaffolding instructional strategy enhances the students learning and academic achievement Faheem, Ahmad, Gul, Hussain and Yousaf (2022). The instructor scaffolds by systematically building on learners' experiences and knowledge as they are learning new skills. The support mechanisms are temporary and adjustable just like the scaffold in the picture on the left. As learners master the assigned tasks, the instructor gradually removes the support s/he offers. There are several forms that scaffolding can take. Scaffolding can come from the instructor, peers, content presentation, task and materials that support thinking and analyzing the content. The main purpose of scaffolding is to provide support during learning in order to gradually remove the support when learning becomes solidified or when the learner becomes more independent and able to transfer learned skills to new situations. Alibali (2006) suggests that as student progress through a task faculty can use a variety of scaffolds to accommodate students' different levels of knowledge. Scaffolding teaching

instruction was very effective in teaching at the elementary level (Fahad and Khan 2019). Scaffolding teaching strategy improved the achievement of students, and males were better receptors of the instructional strategy (Louisa 2021).

METHODOLOGY

The study employed quasi-experimental research design specifically, the pretest posttest non-equivalent control group design. The population of the study was made up of 61 primary five pupils who exhibited the characteristics of ADHD in six public primary schools in Azare metropolis of Bauchi state, Nigeria. ADHDDRS was administered to identify pupils with ADHD symptoms, those identified are the ones who qualified for the study. The sample for this study is made up of 15 Pupils with ADHD from two schools selected for the study out of the six schools. The two schools that will constitute the sample for the study are schools C and E, One of the two schools served as the experimental class, while the other served as the control class. Simple random sampling technique was used to obtain the two schools used for the study. The instrument for data collection was English Achievement Test (EAT). It's an achievement test adapted by the researcher. It is an objective test that has 20 items with options A-E and field in the blank spaces, and a multiple choice, each item has one correct answer that the pupils should circle. The items of the test were drawn from the terminal examination questions for primary five.

Results

Table 1: Pretest and Posttest Academic Achievement Mean and Standard Deviation Scores of Primary 5 Pupils with ADHD in the Experimental and Control Groups

Group	N	Pre-test $\bar{x}$	SD	Post-test $\bar{x}$	SD	$\bar{x}$ Gain	Post-test Difference	$\bar{x}$
Experimental	7	31.43	2.07	56.29	3.04	13.86	11.07	
Control	8	36.00	2.36	39.88	0.54	0.98		

NB: N =15. Decision benchmark, $\bar{x}$ 0.0 - 49.0 = low, and $\bar{x}$ 50.0 – 100.0 = High for 100% Total score

Table 1 shows that the experimental group had a pre-test mean and standard deviation of 31.43 and 2.07, respectively. Whereas, the control group had pre-test mean and standard deviation scores of 36.00 and 2.36, respectively. The experimental groups' post-test means and standard deviation scores are 56.29 and 3.04 (mean gain = 13.86), while that of the control group are 39.88 and 0.54, respectively (mean gain = 0.54). The post-test mean difference between the experimental and control group was 11.07. This implies that pupils with ADHD had low academic achievement before exposure to the strategy, but those in the experimental group later increased due to exposure to scaffolding strategy.

Table 2: ANCOVA Result of the Difference Between the Pre-test and Post-test Academic Achievement Mean Scores of Primary 5 Pupils with ADHD in the Experimental and Control Groups

Source	Type III Sum of Squares	Df	Mean Square	F	P	Eta Squared
Corrected Model	1547.71[a]	2	773.86	110.52	.000	.949
Intercept	49.17	1	49.17	7.02	.021	.369
Pre-test	11.41	1	11.41	1.63	.226	.120
Post-test (Group)	413.96	1	413.96	59.12	.000	.831
Error	84.02	12	7.00			
Total	32640.00	15				
Corrected Total	1631.73	14				

NB: R Squared = .988 (Adjusted R Squared = .986).

In Table 2, the pre-test probability value (p = 0.226) was higher than the 0.05 level of significance. This indicates that the experimental and control groups' pretest academic achievement do not differ significantly (F (1, 12) = 1.63, p >.05). Additionally, after adjusting for pre-test effects, the post-test mean score had a p-value below the 0.05 level of significance at 1 and 12 degrees of freedom (p = 0.000). The null hypothesis is thus rejected, since the experimental and control groups differed significantly in terms of academic achievement (F (1, 12) = 59.12, p < .05. Scaffolding strategy accounted for 98.8% transformation in academic achievement with an effect size of η^2 = 0.831. It implied that scaffolding strategy significantly enhanced English academic achievement of primary 5 pupils with ADHD in Azare katagum LGA, of Bauchi State, Nigeria.

Table 3: Pretest and Posttest Academic Achievement Mean and Standard Deviation Scores of Male and Female Primary 5 Pupils with ADHD in the Experimental Group

Group	N	Pre-test $\bar{x}$	SD	Post-test $\bar{x}$	SD	Post-test $\bar{x}$ Difference	Post-test Effect Size	Remark
Male	5	34.33	6.14	59.08	6.52	0.08	0.000	Minimal
Female	2	33.43	5.62	59.00	7.14			

NB: N =19. Decision benchmark, $\bar{x} \leq 15.0$ = low, and $\bar{x} > 15.0$ = High for 5 items using a 5-Likert scale

Table 3 results indicated that male and female pupils had pretest mean scores of 34.33 (SD = 6.14) and 33.43 (SD = 5.62), respectively. At the post-test, the mean scores of males (59.08, SD = 6.52) are almost at the same level with that of the females (59.00, SD = 7.14)

EDITOR-IN-CHIEF
Prof. A.I. Mteiye [MALAWI]

with a difference of 0.08 and no effect size of 0.000. This signifies that gender difference in academic achievement between male and female pupils with ADHD in the experimental group was very minimal.

Table 4: ANCOVA Result of the Gender Difference between the Pretest and Posttest Academic Achievement Mean Scores of Primary 5 Pupils with ADHD in the Experimental group

Source	Type III Sum of Squares	Df	Mean Square	F	P	Eta Squared
Corrected Model	0.04[a]	2	0.02	0.00	1.000	.000
Intercept	1790.18	1	1790.18	37.06	.000	.698
Pre-test	0.01	1	0.01	0.00	.989	.000
Gender (Post-test)	0.03	1	0.03	0.01	.979	.000
Error	772.91	16	48.31			
Total	67030.00	19				
Corrected Total	772.95	18				

NB: R Squared = .000 (Adjusted R Squared = .125).

Table 4 indicated that the pre-test probability value of 0.989 is more than the 0.05 level of significance indicating no significant difference between the male and female pre-test academic achievement mean scores of pupils with ADHD in the experimental group ($F (1, 18) = 0.00, p > .05$). Likewise, the post-test mean score also had a p-value that was greater than the 0.05 level of significance ($p = 0.979$) after controlling for the pre-test effect. Consequently, there was no significant difference in academic achievement between the male and female pupils ($F (1, 18) = 0.01, p > .05$. Gender accounted for 0.0% variance in academic achievement with no effect size ($\eta^2 = 0.000$). This meant that gender did not significantly influence English language academic achievement of primary 5 pupils with ADHD in Azare, Katagum LGA of Bauchi State, Nigeria.

SUMMARY OF FINDINGS

Using a quasi-experimental (pretest posttest non-equivalent control group design) the findings are summarised as follows:

1. Pupils with ADHD had low academic achievement before exposure to the strategy, but those in the experimental group later increased due to exposure to scaffolding strategy. Experimental and control groups differed significantly in terms of academic achievement ($F (1, 12) = 59.12, p < .05$.
2. Scaffolding Teaching Strategy did not affect the academic achievement of both male and female primary 5 pupils with ADHD differently, ($F (1, 18) = 0.01, p > .05$.

DISCUSSION OF FINDING

The findings revealed that before being exposed to the scaffolding strategy, pupils with ADHD had poor academic achievement; but, after being exposed to the strategy, those in the experimental group subsequently improved significantly. Onah (2022) determined the effect of scaffolding teaching approach on students' academic achievement in secondary school Physics. The findings showed that students in scaffolding teaching approach group achieved better than their counterpart who did not benefit from the scaffolding teaching method. Scaffolding teaching strategy introduced assistive learning and individualised learning which helped improved writing skills and addressed writing difficulties by instructing spacing techniques, providing specialised writing paper, and implementing structured comprehensive reading programmes (Cedillo, Tello & Argudo-Serrano, 2024). Also, in tandem with the current findings, Situmorang (2022) looked into improving the academic achievement in English language through developing students' self-efficacy of verbal persuations. Findings indicated that the average scores increased between pretest and posttest, where many students were satisfied with their test results.

Hypothesis finding further confirmed that the experimental and control groups differed significantly in terms of academic achievement where scaffolding teaching strategy accounted for reasonable (77.9%) change in academic achievement to a very effect size. This demonstrated that scaffolding strategy would significantly enhance English academic achievement of primary school pupils with ADHD. In harmony, Faheem, Ahmad, Gul, Hussain and Yusuf (2022) evaluated the effect of scaffolding teaching method on students' academic achievement in mathematics. The result revealed that students secured high marks in experimental group as compared to control group. This implied that scaffolding instructional strategy would enhance the academic achievement of pupils with ADHD. Similarly, the determinants of students' academic achievement in English studies were carried out by Uba (2025). Results of the study indicated a significant linear relationship between teacher effectiveness in supportive instruction and students' performance in English language. Pupils with ADHD who received supportive teaching are likely to perform significantly high in academic achievement.

Moreover, findings suggested that gender difference in academic achievement between male and female pupils with ADHD in the experimental group was very minimal. Consequently, there was no significant difference in academic achievement between the male and female pupils where gender accounted for no percentage (0.0%) variance in academic achievement, with no effect size. Closely related to current outcomes, Obafemi, Saadu, Yahaya, Obafemi, and Yakubu (2024). Carried out a study on the effect of scaffolding instructional strategy on pupils' academic performance in mathematics. The findings of the study revealed that the interaction of treatment and gender did not have any significant effect on the academic performance of pupils in mathematics. The current

finding meant that gender did not significantly influence English language academic achievement of primary school pupils with ADHD. In disharmony, Abuh (2021) determined the influence of gender on students' academic achievement in science and technology education (STE) taught using innovative strategies. The findings revealed that male students achieved higher than female. Also, there was significant impact of treatment and gender on students' academic achievement in STE. The variations between this previous finding and current finding could traceable to method, procedure, and targeted population. The current finding implied that pupils with ADHD would achieve in English language irrespective of gender influence.

Conclusion

This eight weeks study into the effects of scaffolding teaching strategy on academic achievement of primary school pupils in Bauchi State Nigeria revealed a significant success of enhancing academic achievement of pupils with Attention-Deficit Hyperactivity Disorder. The findings of the study indicate the need for incorporating scaffolding strategy by the classroom teachers who have pupils with ADHD in their classes.

Recommendations

The following recommendations were made:

1. Teachers should adopt scaffolding teaching strategy for better understanding of English, and enhancing academic achievement of pupils with attention deficit hyperactivity disorder.
2. Education managers should organized workshops, seminars and conferences for teachers on the importance of using activity based teaching strategy like scaffolding strategy in their classes so as to assist learners with ADHD.

REFERENCES

Alibali, M. (2006). *Does Visual Scaffolding Facilitate Students' Mathematics Learning?* Evidence from Early Algebra. Madison: University of Wisconsin.

Barbaresi, W. J., Colligan, R. C., Weaver, A. L. & Voigt, G. R. (2018). Mortality, ADHD and psychosocial adversity in adults with childhood ADHD: A Prospective Study. *Journal of pediatrics*

Betiku, O. F. (2002), Gender equity in science, technology and mathematics: paper presented at the 3rd Biennial conference of WCCI Nigeria Chapter, Abuja 26th – 29th April.

Cedillo, T. & Argudo, S. (2024) Teaching strategies for children with attention deficit hyperactivity disorder in English as foreign language classrooms Resistances *Journal of the Philosophy of History* 5(9):e240143
.

Faheem, K. Ahmad A., Gul M., Hussain S. & Yousaf S. (2022) effect of scaffolding teaching method on students` Academic Achievement in Mathematics. *Journal of social science and management 1* (2), 57-61, 2022

Faheem, M., Akram w., Akram H., Khan M. A., Siddiqui F. A., & Majeed I. (2022). Gender based differences in prevalence and effects of ADHD in Adults: A systematic review. *Aslan journalof psychiatry* 75 (5)

Jabir, M. S. & Farooq M. S. (2022). Development and validation of Students' Academic performance scalefor high secondary schoollevel. Global Social Science Review, VII 9(II),https://doi.org/10.31703/gssr.2022(VII-II).44

Louisa, U.O (2021) effect of scaffolding teaching strategy on the academic achievement of students in socisl studies for value re-orientation and national development. *Unizik journal of educational research and policy studies* 6 13(3), 1-12. https://doi.org/10.3390/educsci13030298. *Retrieved on 16th June, 2024*

Nnamani, S. & Oyibe O. A. (2016).Gender and Academic Achievement of Seniour Secondary School Students in Social Studies in Abakaliki Urban of Ebonyi State. *British journal of Education, vol4* (8)

Nazarova, V. A., Sokolov A. V., Chubarev V. N., Tarasov V. V. & Schioth B. H. (2022). Treatment of ADHD: Drugs, Psychological Therapies, devices, complementary and alternative method as well as the trends in clinical trials. Publish 17 november 2022. DOI10.3389/fphar.2022.1066988

Uba J. (2025). Determinants of Students' Academic Achievement in English studies in Cross River State, Nigeria". Retrieved from https://www.academia.edu/33876741 on 26th January 2026

Unni, J. C., Despande L. & Srivastava, A. (2022). Attention Deficit Hyperactivity Disorder. Indian Academy of Pediatrics. Retrieved from iapindia.org/pdf/ch-100-Attention-Deficit- Hyperactivity-Disorder.pdf

Unesco (2000) Nigeria Educational Research and Development Council (NERDC) Yaba, Lagos

Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry, 17*(2), 89100