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Research Article

Effective classroom management and students' academic performance: A study in one of the middle secondary schools in Bumthang district

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ABSTRACT

The classroom is crucial for students, and effective classroom management within the classroom can affect students' academic performance. This experimental study was carried out to explore Effective Classroom Management and Students' Academic Performance in biology for ten grader students in Ura Middle Secondary School. The study adopted a one-group pre-test post-test quasi-experimental design and survey questionnaires to elicit data from the 32 respondents. Three research questions and three hypotheses were also formulated to guide the study. The data obtained were subjected to descriptive statistics and chi-square (X^2) analysis. All the null hypotheses were tested at a 0.05 level of significance. The findings, in general, indicated that there was a statistically significant increase in the mean marks of biology in the class test when classroom management techniques are used to complement the traditional mode of teaching. The overall result from the survey also indicated that there was a substantial increase in academic performance based on verbal instruction, instructional supervision, and delegation of authority to the learners. It is thus recommended that teachers should be skilled in classroom management to influence academic performance positively.

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INTRODUCTION

The unconducive learning environment in both private and public schools has posed serious glitches to students' academic performance. The poor students' academic performance has caught the attention of many stakeholders including teachers, parents, guidance counselors, and researchers (Nyido, 2011). Numerous studies have highlighted classroom management as a variable of students' academic performance. The most obvious reason for such an assertion is that effective classroom management would enable learners to study in a way that is interesting, enjoyable, and purposeful. Correa et al., (2017) and Dela Fuente (2021) stated that effective classroom management creates an appropriate environment so that learners can achieve meaningful learning and enhance learner's moral and social growth in the school.

Classroom management is defined as 'the actions the teacher takes to create an environment that supports and facilitates both academic and social-emotional learning' (Dela Fuente & Biñas, 2020; Everston & Weinstein, 2006). It also sets the foundation for students learning behavior and academic performances in school. Using effective classroom management is extremely important for teachers to have a successful classroom environment. Everston and Weinstein (2006) have identified five characteristics of effective classroom management which the teacher should care of through their actions. These characteristics are a caring climate and cooperative relations with teachers and learners, organizing and implementing instructions, encouraging learners, developing and promoting learners' sociological skills, and interventional measures. This type of learning place and environment can make the teaching-learning process more effective instead of rapid development in every field including education. George et al., (2017) have identified four different classroom management techniques which are widely practiced. They are corporal punishment, verbal instruction, instructional supervision, and delegation of authority to the learners. Corporal punishment is used as an effective management technique across schools until very recently when it was banned almost everywhere including our country. For this research, only three techniques are discussed.

Academic performance refers to the ability to study, remember facts and be able to communicate their knowledge verbally or through witting (Dela Fuente, 2019; Ndiyo, 2011). However, for this research purpose, academic performance refers to the performance or achievement in the class test. Classroom management techniques have a direct relationship with students' academic achievement. It was found that effective classroom management significantly increases the academic achievement of students and decreases behavioral problems of the students like in government schools of Kohat district in Pakistan (George et al., 2017; Nisar et al., 2019). George et al., (2017) and Nisar et al., (2019) have also found that very little learning occurs in disorganized and chaotic classrooms coupled with poor academic results (Oliver et al., 2011) for those students with weaker management by teachers in the classroom. It is apparent because learners' behavioral problems are a constant threat to their learning environment. In contrast, teaching-learning is only effective if the entire environment for teaching is made healthy and upgraded through effective classroom management.

Teachers vary in how they manage their classrooms (Dela Fuente, 2021), but little is known regarding the relationship between effective classroom management and learners' academic performance. Therefore, the purpose of the research is to determine the effectiveness of different classroom management techniques in academic performance in biology in tenth grade. By using the quasi-experimental method, the data was collected by pre-test and post-test class tests (the post-test questions were different from the pre-test questions). Further to validate their management satisfaction, students were asked to answer survey questionnaires. Furthermore, researchers such as Obot (2010), George et al., (2017), and Nisar et al., (2019) have investigated effective classroom management and students' academic performance elsewhere and have proved successful. It is thus necessary to examine effective classroom management and its effects on student's academic performance in school.

Objectives

1. To access the use of verbal instruction and how it could affect students' academic performance in biology in tenth grade.
2. To determine how the use of instruction supervision could affect students' academic performance in biology in tenth grade and
3. To examine how the delegation of authority to students affects their academic performance in biology in tenth grade.

The following research questions were raised:

i. How does verbal instruction affect students' academic performance in biology in tenth grade?
ii. In what ways does the use of instructional supervision affect students' academic performance in biology in tenth grade?
iii. How does delegation of authority to learners affect students' academic performance in biology in tenth grade?

Research Hypotheses

i. Verbal instruction does not significantly affect the student's academic performance in biology in grade ten.
ii. Instructional supervision does not significantly affect the student's academic performance in biology in grade ten.
iii. Delegation of authority to learners does not significantly affect the student's academic performance in biology in grade ten.

Literature Review

Classroom Management: Concepts and Approaches

Classroom management refers to creating a safe and stimulating environment (George et. al., 2017) and has been highlighted as the major variable that affects every aspect of students' performance and achievement. Martin and Baldwin in Djigic and Stojilkovic (2001) defined classroom management as a multifaceted construct that includes: personality, teaching, and discipline dimensions. Effective classroom management set the foundation for cognitive and social-emotional development among students (Patrick, 2016; Nisar et al., 2019) and the stage for the effective teaching-learning process (Nair, et. al., 2019). In other words, classroom management is the science of making decisions and taking control of whatever is taking place during the teaching and learning process.

The concept of classroom management indicates the combination of the teacher's roles and the process designed to bring improved results (Djigic & Stojilkovic, 2011). However, it is not limited to but includes student control and discipline, and teachers' actions in the classroom to foster academic involvement and cooperation in the classroom to create a conducive learning environment (Roger, 2020). Williams (2008) strategized classroom management as how the teacher works, how the class works, how the teacher and students work together, and how teaching and learning take place. According to Everston and Weinsten (2006), classroom management is an act that a teacher could take in the class to make an environment that could be supportive and facilitative for both learners and teachers. Therefore, it would mean curtailing learners' disruptive behavior (such as fighting), making close observations and arrangement of classroom learning materials, and responding to students who suffer from poor vision, reading, shame, dullness, hyperactivity, and poor study habits. Thus, teaching would be effective only if the entire environment including classroom management is made healthy and upgraded. While classroom management is viewed as an overarching holistic approach, incorporating every element of classroom management from lesson planning to lesson

delivery to creating a conducive learning environment becomes crucial (George et al., 2017). Nicholas (2007) stated that creating an organized and orderly classroom, establishing expectations, including students' cooperation in learning tasks, and dealing with procedural demands of the classroom as key elements of classroom management. Everston and Weinstein (2006) also identified five characteristics of effective classroom management i.e., i) a caring climate and cooperative relations between students and teachers ii) organizing and implementing instruction ensuring maximum learning, iii) encouraging and developing and promoting sociological skills, iv) developing and promoting learners' sociological skills and v) interventional measures to help learners with behavioral issues. This type of learning place and environment can only make the teaching-learning process more effective and productive for today's students because of the rapidly changing and development in every field.

Classroom Management Techniques

Teachers can intellectually and professionally deal with disruptive behaviors in the classroom and reduce them to the minimum through effective classroom management so that successful learning can take place (George et al., 2017). Patrick (2016) has observed that effective classroom management strengthened the instructional process and makes it more productive, effective, and successful. There are several classroom management techniques practiced elsewhere, however, for this research purpose, only three techniques (verbal instruction, instructional supervision, and delegation of authority to learners) are discussed. The use of verbal instruction is one technique that is widely adopted by teachers. A clear instruction on what and who should be done will be given to the students enabling them concrete direction and compliance (Good, 2004) so that it produces desired outcome or results. Instructional supervision and delegation of authority to learners are other two techniques of effective classroom management that are widely used. In the former, a teacher moves around the classroom and observes students closely, engages students in academic activities, asks questions, and employs both verbal and non-verbal teaching methods to ensure that students are paying attention (Obot, 2010). In the latter technique, the teacher delegates his or her authority to deserving students and assigns them duties such as cleaning the board, timekeeping, controlling the class, managing learning materials, collecting assignments from students and submitting them to teachers, copying lesson notes on the chalkboard and or class captain on behalf of the class (Nima, 2004). Nonetheless, according to Walter (2006), classroom management differs from one teacher to another because of the teacher's teaching style, qualifications, preparedness, personality, and the number of students. In other words, effective classroom management is determined by teacher qualifications, teacher experience, and instructional assessment methods. Classroom management is eventually aimed to produce a conducive learning environment where students can learn with ease and interest and improve their academic scores. Thus, classroom management is not a condition but a process for both teachers and students.

Classroom Management and Academic Performance

Teachers' ability to coordinate the classroom and control their students' actions is crucial for achieving a positive result. Increasing classroom management and practices have been associated with student outcomes. It has been documented that there was a significant increase in students' engagement, a reduction in disruptive and aggressive behavioral problems, and improved academic performance in students (George et al., 2017; Gage et al., 2018; Nair et al., 2019; Roger, 2020).

An experiment conducted by Oliver et al., (2011) showed a similar result where learners are always turning towards learning activities and left all tasks including taking a low or poor interest in the teaching-learning process and their divergent attention from the classroom in the conducive learning environment. On the contrary, it has been learned that very little to no learning takes place in chaotic and disorganized classrooms (Idopise, 2004; Nair et al., 2019; Roger, 2020). Poorly managed classrooms in different school levels showed frequent disruptive behavior such as sleeping, coming late, miscopying notes, making noise, chewing or eating, diverting attention, calling nicknames, and verbal or physical threats to fellow friends or teachers (Ekere, 2006). Such behavior ought to hamper the teaching-learning process and ultimately affects the academic performance of

the students. Corporal punishment as an effective management technique was also used to produce an orderly classroom setting and lessen disruptive offense (George et al., 2017) thereby showing a positive impact on student's academic performance.

METHODS

The study was cross-sectional and analytical in nature. This study used a one-group pre-test post-test quasi-experimental design as used by Dela Fuente (2021) and questionnaires to pilot the effectiveness of the use of different classroom management techniques on students' academic performance.

Table 1. Pre-test and post-test design (one group)

Group	Pre-test and Questionnaires	Treatment	Post-test and Questionnaires
1	01	Orientation and refresher course on Effective Classroom Management	02

the students. Corporal punishment as an effective management technique was also used to produce an orderly classroom setting and lessen disruptive offense (George et al., 2017) thereby showing a positive impact on student's academic performance.

Participants

Thirty-two grade ten students from two sections were selected to participate in the study. In this sampling, the researcher selects the participants based on previous knowledge and the research purpose using personal judgment in selecting the sample.

Instruments

The instruments used in this study was questionnaires and class test. The researcher made a questionnaire entitled 'effective classroom management and students' academic performance questionnaire' adapted from George et al., (2017) to elicit the responses. The instrument was scrutinized by two avid researchers. The instrument had a 4-point rating scale as follows: Strongly Agree (SA), Agree (A), Disagree (DA), and Strongly Disagree (SD). The researcher also set the questions for the class test with a maximum mark of 25 with different items (multiple choice questions (5m), fill in the blanks (5m), matching item (5m), and short response items (10m)).

Action Plan

Baseline data for this action research was collected through a class test and survey questionnaires (N=32) from grade ten students. These data collection methods helped students to reflect on the teacher's teaching-learning process. After the baseline data collection, intervention strategies were administered to the students of the same grade for three months from May to September (three weeks of August month were excluded due to midterm examination and midterm break). In between the intervention, the second-class test was conducted. Post-intervention data were collected in the last week of September through the same survey questionnaires (N=32).

Data Collection

In the first round of the teaching-learning process, the researcher focused on syllabus and pedagogy with little or no classroom management after which the pre-test (two-time class tests) and questionnaires were administered. After the pre-test and questionnaires survey, teachers attended a professional development program on 'Effective Classroom Management' by the principal and senior teachers from the same school. During the treatment design, the researcher incorporated all the strategies and methods of effective classroom management in almost every session of the class

for more than three months and conducted class tests simultaneously. Following the end of the treatment program, post-test (three-time class tests) and questionnaires were once again administered to the participants.

Data Analysis

The data obtained from the student' survey questionnaire and class test were analyzed using descriptive statistics and MS excel version 2016. The post-data survey was analyzed using chi-square (X^2) and all the null hypotheses were tested at 0.05 level of significance and 12 df.

Ethical Consideration

The data collection involved research approval and ethical procedures. Firstly, the researcher got approval from the principal [head of the school], secondary school. Then, the principal informed the class teachers and students of tenth grade respectively. Thereafter, the researcher informed the student participants about the purpose and objectives of the study. The participants were also informed of the right to withdraw if felt necessary. Most importantly, the researcher assured that the identity of participants and information shared will be treated with utmost confidentiality, and the information will be exclusively used only for this study.

RESULTS

The data on different classroom management techniques are presented below. Table 1. shows 'how verbal instruction affects students' academic performance' from 32 respondents. The survey data indicates that the teacher was not inculcating verbal instructions in the classroom. It means that the teacher is syllabus-centric without any set directions. The majority of the respondents disagreed (M=16.40) that a teacher gives verbal instruction in the classroom meaning a teacher is not concerned over the students' expectations and involvement in the class. Such a mode of the teaching-learning process is often teacher-centric (traditional method of teaching) with fewer interactions in the class.

Table 2. Descriptive statistics of the pre-survey questionnaire

How verbal instruction does affects students' academic performance?				
N= 32				
Rating Scale	SA	A	D	SD
Mean	1.60	14.00	16.40	0.00
SD	3.58	5.83	8.17	0.00
SDE	0.63	1.03	1.45	0.00

Similarly, table 2 shows 'how does the use of instructional supervision affect students' academic performance in biology'. The mean and SD for respondents with a rating scale of strongly agree, disagree, and strongly disagreed is [M=2.20, 13.40, 12.00, and 4.40] and [SD[3.49, 5.41, 7.78, and 4.16] respectively. Almost equal respondents agreed [M= 13.40] and disagreed [M=12.00] that a teacher provides them with instructional supervision in the class. It means a teacher seldom moves around the classroom to supervise the task. It is also apparent that with such a management style, students lose track of what they are supposed to do, often failing the gross objectives of the lesson. The SD for the same items is also tabulated in the table below.

Table 3. Descriptive statistics of the pre-survey questionnaire

In what ways does the use of instructional supervision affect students' academic performance?
N= 32

Rating Scale	SA	A	D	SD
Mean	2.20	13.40	12.00	4.40
SD	3.49	5.41	7.78	4.16
SDE	0.62	0.96	1.38	0.74

A survey finding on 'how delegation of authority to learners affects academic performance' is shown below (Table 3). The data revealed that the majority of them agreed that a teacher assigns them authority while in the class [*M*=19.80 and *SD*=4.09]. However, none of the respondents strongly agreed that a teacher delegates them some authority in the classroom during the teaching-learning process.

Table 4. Descriptive statistics of the pre-survey questionnaire

How does delegation of authority affect students' academic performance?				
N= 32				
Rating Scale	SA	A	D	SD
Mean	4.60	19.80	7.60	0.00
SD	4.16	4.09	7.16	0.00
SDE	0.74	0.72	1.27	0.00

The pre-test was also carried out in the third week of April with total respondents of 32. The pre-test questions were set with a maximum mark of 25. Items for the class test comprise of multiple-choice questions (5 marks), fill-in-the-blanks (5 marks), matching the items (5 marks), and short response items (10 marks). Table 4 shows the cumulative descriptive statistics of all the participants of two class tests before the intervention with a mean score of 7.5 and SD of 3.5 respectively.

Table 5. Descriptive statistics of the pre-test result for biology

	Mean	N	SD
Pre-test	7.5	32	3.5

The table below (table 5) shows the descriptive statistics of how verbal instruction affects students' academic performance collected after the intervention. In baseline data, the majority of the respondents were either agreed [*M*=14.00, SD=5.83] and/or disagreed [*M*=16.40, *SD*=8.17] with the statement 'how does verbal instruction affects students' academic performance'. Contrary to post-data, the majority of the respondents [*M*=23.20, *SD*=6.22] strongly agreed with the same statement. It means that a teacher has clearly instructed them on what to do in the classroom, stress any disciplinary issues, given clear directives on when one should discuss or not, warns students to not lose track, and directs them on how to be attentive in the classroom. Such practices often minimize behavioral issues in the classroom. It shows that a teacher has incorporated classroom management techniques, especially verbal instruction.

Table 6. Descriptive statistics of the post-survey questionnaire

How does verbal instruction affects students' academic performance?				
N= 32				
Rating Scale	SA	S	D	SD
Mean	23.20	7.00	1.80	0.00
SD	6.22	4.12	2.17	0.00
SDE	1.10	0.73	0.38	0.00

Similarly, table 6 shows the comparison of class test scores conducted after the intervention. The format and pattern of the test paper remain the same as in the baseline data collection, however, the topic was different. The students have performed much better after intervention as evidenced by the data (*M*=7.5 and *SD*=3.5 for baseline data and *M*=12.6 and *SD*=3.3 for post-data respectively). The total mean score has increased by approximately 5.1 indicating the achievement of students' learning outcomes.

Table 7. Descriptive statistics of the pre-test and post-test results for biology

How does verbal instruction affect students' academic performance?			
	Mean	N	SD
Pre-test	7.5	32	3.5
Post-test	12.6	32	3.3

The researchers sought to find if a relationship exists between classroom management and academic performance. To establish a relationship, the researchers use chi-square. The following (Figure 2) shows the calculation of the chi-square. The figure shows that verbal instruction significantly influences students' academic performance as evident from the post-tests chi-square where the calculated value is greater than the critical value (i.e., 26.83 > 21.026). Therefore, the null hypothesis [1] is rejected.

Observed Frequency (O)	Expected Frequency (E)	O-E	$(O-E)^2$	$\sum \frac{(O-E)2}{E}$
28	23.2	4.8	23.04	0.99
19	23.2	-4.2	17.64	0.76
30	23.2	6.8	46.24	1.99
15	23.2	-8.2	67.24	2.90
24	23.2	0.8	0.64	0.03
4	7	-3	9	1.29
10	7	3	9	1.29
2	7	-5	25	3.57
12	7	5	25	3.57
7	7	0	0	0.00
0	1.8	-1.8	3.24	1.80
3	1.8	1.2	1.44	0.80
0	1.8	-1.8	3.24	1.80
5	1.8	3.2	10.24	5.69
1	1.8	-0.8	0.64	0.36
0	0	0	0	0.00
0	0	0	0	0.00
0	0	0	0	0.00
0	0	0	0	0.00
0	0	0	0	0.00
				$X^2 = 26.83$

At 12.df; significant value of 0.05, critical value is 21.026

Table 7 shows the descriptive data analysis of how instructional supervision affects students' academic performance. It shows that the majority of the respondents strongly agreed [*M*=27.40, *SD*=5.46] with the statement. None of the respondents strongly disagreed with the statement. It means that a teacher during the teaching-learning process ensures that students actively participate in the class by constantly monitoring them in any sort of class activities. A teacher also conducts himself around to note those learners who fail to copy a note from the board or while dictating. The teacher is also against malpractice during tests or examinations. However, the majority of the respondents disagreed with the same statement in baseline data collection.

Table 8. Descriptive statistics of the post-survey questionnaire

In what ways does the use of instructional supervision affect students' academic performance?				
N= 32				
Rating Scale	SA	A	D	SD
Mean	27.40	2.60	2.00	0.00
SD	5.46	2.79	2.83	0.00
SDE	0.97	0.49	0.50	0.00

The table below (table 8) shows the comparison of test scores in baseline data and post-intervention data. It shows that students have improved in-class tests in comparison to the baseline data. The mean score (*M*= 7.5 for baseline data and *M*=11.9 for post data) has increased by 4.4 with a slight increase in *SD* (0.7).

Table 9. Descriptive statistics of the pre-test and post-test results for biology

In what ways does the use of instructional supervision affect students' academic performance?			
	Mean	N	SD
Pre-test	7.5	32	3.5
Post-test	11.9	32	2.8

The following figure shows the calculation of chi-square for instructional supervision. It shows that instructional supervision has significantly influenced the academic performance of the students as the calculated value is greater than the critical value (i.e., 32.85 > 21.026). Therefore, the null hypothesis of 'instructional supervision does not significantly influence students' academic results' [hypothesis 2] is rejected.

Observed Frequency (O)	Expected Frequency (E)	O-E	$(O-E)^2$	$\Sigma\frac{(O-E)2}{E}$
32.00	27.40	4.60	21.16	0.77
21.00	27.40	-6.40	40.96	1.49
30.00	27.40	2.60	6.76	0.25
22.00	27.40	-5.40	29.16	1.06
32.00	27.40	4.60	21.16	0.77
0.00	2.60	-2.60	6.76	2.60
5.00	2.60	2.40	5.76	2.22
2.00	2.60	-0.60	0.36	0.14

6.00	2.60	3.40	11.56	4.45
0.00	2.60	-2.60	6.76	2.60
0.00	2.00	-2.00	4.00	2.00
5.00	2.00	3.00	9.00	4.50
2.00	2.00	0.00	0.00	0.00
6.00	2.00	4.00	16.00	8.00
0.00	2.00	-2.00	4.00	2.00
0.00	0.00	0.00	0.00	0.00
5.00	0.00	5.00	25.00	0.00
2.00	0.00	2.00	4.00	0.00
6.00	0.00	6.00	36.00	0.00
0.00	0.00	0.00	0.00	0.00
				X^2 =32.85

At 12.df; significant value of 0.05, critical value is 21.026

Table 10. Descriptive statistics of the post-survey questionnaire

How delegation of authority does affects students' academic performance?				
N= 32				
Rating Scale	SA	S	D	SD
Mean	13.20	10.40	2.00	6.40
SD	12.24	10.92	2.12	14.31
SDE	2.17	1.93	0.38	2.53

The above table shows the descriptive statistics of how delegation of authority affects students' academic performance in biology. The survey data revealed that there is a significant increase in the number of respondents to the statement in comparison to baseline data. The mean values have increased significantly in comparison to baseline data (M=13.20 in post-data and M=4.60 in baseline data). A hundred percent of the respondent strongly disagreed that a teacher is partial in appointing responsibilities. This shows that a teacher delegate authority in the class like appointing a timekeeper, cleaning or fixing the board or projector, and noting down the latecomers or who disturb the class. Such delegation of authority to the learners helps to value their sense of responsibility and fundamental duties which eventually enhances academic results.

Table 11. Descriptive statistics of the pre-test and post-test results for biology

How does delegation of authority affect students' academic performance?			
	Mean	N	SD
Pre-test	7.5	32	3.5
Post-test	12.3	32	2.9

The above table shows the comparison of test scores between baseline data and post-data. The data revealed that there is a substantially increased in the score with a mean of 12.3 in post-data and 7.5 in baseline data respectively. In summary, the average mean of different classroom management techniques is 2.80 and 21.26 for baseline data and post-intervention data respectively. Similarly, the average mean for class test scores is 7.5 for baseline data and 12.26 post-intervention data correspondingly. The test means score at each time of the series has increased approximately by 2.55 on average and also the respondents of the survey questionnaires. Such an increase in mean

value indicates the achievement of students' learning outcomes in biology which is evidence of improved classroom management interventions.

Observed Frequency (O)	Expected Frequency (E)	O-E	$(O-E)^2$	$\Sigma\frac{(O-E)2}{E}$
20.00	13.20	6.80	46.24	3.50
29.00	13.20	15.80	249.64	18.91
15.00	13.20	1.80	3.24	0.25
0.00	13.20	-13.20	174.24	13.20
2.00	13.20	-11.20	125.44	9.50
9.00	10.40	-1.40	1.96	0.19
3.00	10.40	-7.40	54.76	5.27
12.00	10.40	1.60	2.56	0.25
0.00	10.40	-10.40	108.16	10.40
28.00	10.40	17.60	309.76	29.78
3.00	2.00	1.00	1.00	0.50
0.00	2.00	-2.00	4.00	2.00
5.00	2.00	3.00	9.00	4.50
0.00	2.00	-2.00	4.00	2.00
2.00	2.00	0.00	0.00	0.00
0.00	6.40	-6.40	40.96	6.40
0.00	6.40	-6.40	40.96	6.40
0.00	6.40	-6.40	40.96	6.40
32.00	6.40	25.60	655.36	102.40
0.00	6.40	-6.40	40.96	6.40
				X^2 =228.25

At 12 df; significant value of 0.05, critical value is 21.026

The above figure shows the calculation of the chi-square on how the delegation of authority to learners affects students' performance in biology. According to the data, it has shown that the delegation of authority to students has influenced academic performance because the calculated value is greater than the critical value (i.e., 228.25>21.026). Thus, the null hypothesis [hypothesis 3] is rejected. In summary, a student's well-organized and conducive classroom enables him or her to effectively listen to all the lessons, study hard and recall during the class test or examination. It has also known that a teacher's strict classroom management forced the student to change their habit or attitudes, creates fear, and instill a strong habit of studying smartly which eventually enhance their academic performance.

DISCUSSION

Verbal Instruction and Students' Academic Performance

The result revealed that the inclusion of effective classroom management has significantly improved learners' achievement scores in biology. There was a substantial increase in the survey respondents [*M*=23.20, *SD*=6.22] and chi-square [X^2=26.83] and post-test mean score [*M*=12.6, *SD*=3.3] in the biology test. Such improvement in academic performance is in line with the view of Obinaju (2006), which states that students are often distracted or misbehave and perform below expectations because

the teacher fails to give clear instruction that governs the class. Furthermore, Okon (2009) is also of the same opinion that verbal instruction on what to be done in the classroom gives students a clear set of ideas of what has been expected of them in the classroom and this helps them to concentrate in the class. Furthermore, Ndiana (2009) also stated that if a teacher gives directives on how classroom activities should be done, the classroom will be orderly enough for an effective lesson-teaching-learning process and this will have a positive impact on students' academic performance.
Based on the above result and discussion, it is concluded that the teacher who gives verbal instruction exhibits less disruptive behavior and performs better academically.

Instructional Supervision and Students' Academic Performance

The result of findings in tables 7 & 8, revealed that instructional supervision also significantly influences academic performance in biology tests. George et al., (2017) also asserted the same result whereby effective instructional supervision creates an avenue for an interactive session between teachers and students. Additionally, Essien (2009) also affirmed that effective instructional supervision allows discover their students' weaknesses, strengths, talents, etc., and render academic assistance when the need arises. Similarly, the researchers helped students taking remedial classes, solving past BCSEA papers and home examination papers. A regular tests for weaker students were also conducted and assured that they understood the concept properly. These practices have significantly influenced students' academic performance. Babalola and Ayeni (2009) also postulated that students will develop a keen interest in studies and academic activities if a teacher shows concern for their classroom and academic well-being and encourage them through effective instructional supervision. Thus, it is concluded that those teachers who carry out instructional supervision, are believed to exhibit less disruptive behavior and develop rewarding academic habits in the students.

Delegation of Authority and Students' Academic Performance

The result of the finding (as indicated in tables 9 & 10) also revealed that delegation of authority has a significant influence on students' academic performance. Such a result is also observed in Ubom (2008) and Denga (2001) who has stated that delegation of authority creates an avenue for students to be a part of their academic work. Delegation of authority gives students the feeling that they can play an active role in keeping the classroom safe and orderly (or conduciveness). Denga (2001) further highlighted that since it is the student's responsibility to keep the classroom conducive, the rate at which disruptive behavior occurs will minimize, making classroom management effective to positively influence students' academic performance. Likewise, Adegoke (2004) also opined that students would appreciate the responsibility they are entrusted with through the delegation of authority by their teachers which increases students' participation in school activities in particular academic activities. Therefore, based on the above discussion, it is inferred that the students whose teachers delegate authority exhibit less disruptive behavior and perform better academically like in biology.

Effective Classroom Management and Students' Academic Performance

The result of the research findings revealed that effective classroom management significantly influences biology students' academic performance in Ura Higher Secondary School. Researchers like Ndiyo (2011) and Baker (2000) suggested the similar findings. They pronounced that among many factors that influence academic performance, teachers' efficiency in classroom management stands out as the top priority. Furthermore, effective classroom management techniques support and facilitates effective teaching and learning process, which ultimately improve students' academic performance. Additionally, researcher like Wang (2009) pondered that mastering classroom management techniques and applying them in a real classroom is a base competence for teachers who wish to significantly influence their students' academic performance. Hence, it is deduced that the academic performance in biology in class ten has been significantly influenced by the teacher's classroom management based on the above discussion.

CONCLUSION AND RECOMMENDATION

Based on the result of this study and discussion, it is concluded that class ten students of Ura HSS have significantly improved in academic performance in biology based on verbal instruction, instructional supervision, and delegation of authority. With the observable result and findings from this work, the researchers would like to make the following recommendations: teachers and staff should establish caring, supportive, facilitative, and encouraging attitudes in the classroom so that learners can maximize learning, develop social skills and maintain good disciplinary environment (free of disciplinary issues); teachers should always pay attention to classroom management skills and techniques besides daily teaching so that it influences students' academic result. Furthermore, teachers should give academic assistance to students during [involvement in activities] and after lesson delivery [remedial programs]; teachers should assign responsibilities to students so that they actively participate in the class during the teaching-learning process, and professional development programs and refresher course in schools should focus on acquiring new effective classroom management skills.

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