THE MARKET OF THE TEACHERS TEACHING METHOD ON THE ACADEMIC PERFORMANCE OF STUDENTS OF INTEGRATED SCIENCE STUDY OF 100 LEVEL N. C. E. 2018/2014 MINNA

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NIGER STATE COLLEGE OF EDUCATION, MINNA A PROJECT SUBMITTED TO THE DEPARTMENT OF BIOLOGY SCHOOL OF SCIENCE



#### TITLEPAGE

# THE IMPACT OF THE TEACHERS TEACHING METHOD ON THE ACADEMIC PERFORMANCE OF STUDENTS OF INTEGRATED SCIENCE

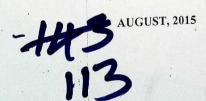
A CASE STUDY OF 100 LEVEL N.C.E 2013/2014 SESSIONS INTEGRATED SCIENCE OF COE MINNA

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A PROJECT SUBMITTED TO THE DEPARTMENT OF BIOLOGY SCHOOL OF SCIENCE, NIGER STATE COLLEGE OF EDUCATION, MINNA

IN PARTIAL FULFILMENT OF REQUIREMENT OF THE AWARD OF NIGERIA CERTIFICATE IN EDUCATION (N.C.E)



### DEDICATION

This project is dedicated to Almighty Allah and to our parents, siblings and also our friends.

### **ACKNOWLEDGEMENTS**

First and foremost praise and thanks be to Allah the Lord of the universe for given us the knowledge and wisdom of choosing and writing up this project through the help of our able supervisor Mr. Goshie Samuel who by his effort saw to the realization of this project. We indeed appreciate his advice and guide.

Not to be forgotten also c ir head of Department of Mallam Shehu Tubaco for his advice and encouragement.

Finally, we must show our gratitude and sincere appreciation to our noble parents for the kind of support giving to us by them to see that we succeed in this project.

# ABSTRACT

College of Education, Minna, 2013/2014 session. The study sought to find out how academic performance of 100levels integrated science students of Niger State This study critically analyzed the impact of teachers teaching method on the teaching method affects academic performance and administered questionnaire to both students and teachers of the department to obtain data. It was found amongst others that the teachers teaching method had a significant impact on students academic performance. Therefore, rejecting the hypothesis stating otherwise, and that adopting appropriate teaching method has significant impact on academic performance. It finally recommended amongst others that schools should engage teachers in training/workshops, on teaching methodology to improve academic performance.

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#### CHAPTER ONE

#### INTRODUCTION

### 1.1 BACKGROUND OF THE STUDY

Teaching method is a vital ingredient for effective learning. Research on teaching methods has for long been of interest to educationists. However, some studies have been carried out on certain aspects of teaching but not much on the academic performance of students. Lavy (2001) investigated teacher's teaching method and class control.

Students hate a particular course because of the lecturer handling such course. This may be chiefly because of the teaching method he adopts in teaching such course. Some other students like a particular course because they like the teaching method adopted by the lecturer. These situations will greatly affect the academic performance of such students.

It is imperative that a skillful lecturer needs to be conversant with various teaching strategies which may be applied to subjects at different class situation.

Favourable method to the students should be imbibed.

### 1.2 STATEMENT OF THE PROBLEM

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There are teachers that are very intelligent and sound on their subject matter. It is not uncommon that students find it difficult to understand what

these teachers teach. The problem of such teachers might be due to inappropriate teaching methods. This study will investigate the impact of teachers teaching method on the academic performance of students.

### 1.3 STATEMENT OF THE STUDY

Many methods of teaching exist in education. All the methods are meant to make teachers succeed in their bid to disseminate knowledge. However, little are considered on some factors that ate necessary before selecting the appropriate method. These methods directly affect their academic performance. This study seeks to investigate the extent to which teachers teaching methods affect the academic performance of students.

#### 1.4 HYPOTHESIS

This study is set to test the following hypothesis:

- HO<sub>1</sub> Teachers teaching method has no significant impact on student academic performance.
- HO<sub>2</sub> Adopting appropriate teaching method by teacher has significant impact on the student academic performance.

### 1.5 OBJECTIVE OF THE STUDY

There are number of teaching methods teachers adopt in disseminating knowledge if these methods are effectively and efficiently implemented, academic performance of students will improve.

This study wishes to examine the extent to which teachers teaching method affect the student's academic performance taking one hundred level (100L) Integrated Science Students 2013/2014 Session of Niger State College of Education as (case study).

#### 1.6 SIGNIFICANCE OF THE STUDY

The impetus of this study is necessitated by the desire to contribute to knowledge in an area that suffered neglect.

This study will provide basis for effective teaching methods by teachers of primary, secondary and tertiary institutions.

### 1.7 SCOPE OF THE STUDY

This study will focus mainly on 100LEVEL[100L] students of integrated science 2013/2014 session in Niger State College of Education Minna.

# CHAPTER TWO LITERATURE REVIEW

#### 2.1 INTRODUCTION

There is a substantial literature on the relationship between teacher and students. Most prior research on this topic did not focus on students' performance. While it is clear that certain teaching methods are more effective than others at increasing students performance, there is considerably less consensus on whether specific teaching method produce higher performance.

#### 2.2 TEACHING METHOD AND ITS DIVERSIFICATION

Research evidence shows that the challenges confronting students and teachers are basically on the methods of impacting the knowledge it was argued by Adufe (2008) that teaching is based on methods which at the long run bring about effective teaching.

Teaching, according to Oladipo and Ayeni (2002) involves bringing about or at least facilitating desirable changes in learners. However, effective teaching requires the teacher to step out of the realm of personal experience and step into the world of the learners. (Brown, 1997).

Instruction is the transmission to the learner and the acquisition by him on specific skills, information, knowledge or other established data. The mode of

instruction or teaching applied in achieving the transmission of specific skills, information, knowledge and other established data is referred to method. Methodology therefore, refers to the process and techniques a teacher uses to transmit facts, skills, information and knowledge to the learners so as to facilitate the accomplishment of the set objectives.

Major problem of imparting knowledge is the method used in communicating the knowledge: TO this, Adepoju (2006) citing Kernest and Levin (1973) revealed the difficulties students encounter when they are instructed using verbal approach.

This is also confirmed by the studies carried out by Busari (1991) which revealed that the method presently employed in teaching, in most of our schools is inadequate or not effective.

Adufe (2008) affirms that many methods of teaching exist in education and these methods are meant to make teachers succeed in their bid to disseminate knowledge.

However, the success in the use of any method differs as a result of an intelligent analysis of the objectives, the students in class, the curriculum content or the type of subject matter.

The impact of any teaching method is not only limited to the conditions surrounding the teaching but also the advantages and disadvantages of a

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The impact of any teaching method is not only limited to the conditions surrounding the teaching but also the advantages and disadvantages of a

particular method in a particular situation should not be left out. Most students fail their course not because they are not good at the subject but because of the teaching method adopted by the teacher in teaching them.

### 2.3 FACTORS DETERMINING TEACHING METHODS

The method must be right for the learners; some teachers consider the selection of method as an area where they have exclusive monopoly.

This conception is wrong as their selection of method would affect their learners. Learners' interest, age, level and weakness should guide the selection of the relevance method for instance, it would be wrong of a teacher to impose the use of discussion method on any category. Omotere 2011.

The method must be also right to the teacher. Every teacher is a unique personality with district behaviour. Some teachers may function well in certain condition and situations while others may flop significantly under similar condition. Omotere, 2011.

The method should be best for the subject matter. By subject matter, we mean the topic to be taught. No matter how good a strategy of teaching is, if method is not in line with the topic, little or no success will be achieved.

The strategy must be right for the resources available: By resources we mean the instructional aids or materials. The decision of a teacher to use a

particular text or a reference material hinges on the available of the text, Adunola (2011).

Adesanya also submitted some basic criteria which must be considered before the selection of any teaching method.

Time allocated: Time allocated for the subject on the time table should be a guide in the selection of teaching method to be adopted. She further explains that a teacher who has a limited time may want to favour lecture method because of it attributes. However, lecture method is not applicable in teaching the fundamental classes.

Also, Ckenzie, et al in Adesanya (2006) argues that the objectives of the teacher should also be considered before the selection of any method. This implies that what the teacher intends to achieve at the end of the lesson should be in line with the selected method.

As a result of these factors, it is advisable that a skillful teacher should consider these factors when he or she needed to achieve stated objective.

Any good teacher knows, all students do not learn in the same way. In addition, it is common for a class of students to be at a variety of levels in any particular subject.

Teachers need all students effectively. A variety of teaching strategies, knowledge of student levels, and an implementation of which strategies are best

for particular students can help teachers to know which teaching methods will be most effective for their class. Omotere, (2011).

Adunola sees assessing students as the first step of choosing a teaching method. This assessment can be formal or informal. Formal assessment include standardized tests,, tests from the textbook or curriculum being used, or teacher created test these assessment can give you an idea of the previous instruction that the students have received as well as their academic level. The students in your class may have undergone various teaching methods and quality of instruction in previsions years.

#### 2.4 TEACHING METHODS/APPROACHES

The term teaching method refers to the general principles, pedagogy and management strategies used for classroom instruction. Your choice of teaching method depends on what fits you – your educational philosophy, classroom demographic, subject area and school mission statement. Teaching theories primarily falls into two categories or approaches teacher centered and student centered. Grasha (1996):

Teacher – centered approach to learning. Teachers are the main authority figures in this model. Students are viewed as "empty vessels" whose primary role is to passively receive information (via lectures and direct instruction) with the end goal of testing and assessment. It is the primary role of teachers to pass

knowledge and information onto their students, as adopted by A.F. Grasha a short period of time. However, this is not the most effective teaching method to reach all students especially younger ones, who often need a more engaging, hand on strategy in order to learn effectively. In addition, it is hard for teachers to tailor instruction to students at different levels.

### INQUIRY-BASED LEARNING METHOD.

This is a teaching method that focuses on student investigation and hands—on learning. In this method, the teacher's primary role is that of a facilitator, providing guidance and support for students through the learning process. Inquiry-based learning falls under the student-centered approach, in that students play an active and participatory role in their own learning process. It is a method which is rapidly gaining popularity in United States. (Theorist A.F Grasha in her Publication, Teaching with style, 1996).

Based on the scientific method, this teaching method can be used for virtually all subjects. The use of inquiry-based learning takes a lot of time, energy, and planning, but it is often very effective. Students practice problem solving and critical thinking skills to arrive at a conclusion. It is a method that can be modified for students at any level, reaching them where they are. Teachers will generally need to start by modeling the process to the students.

### CO-OPERATIVE LEARNING METHOD.

Grasha explained cooperative learning as a method of teaching and classroom management that emphasized group work and a strong sense of community. The method fosters students' academic and social growth and includes teaching techniques such as reciprocal teaching.

Cooperative learning falls under the student centered approach because learners are placed in responsibility of their learning and development.

This method focuses on the belief that students learn best when working with and learning from their peers.

#### 2.5 THEORETICAL FRAMEWORK

Adeleye (2002) in his research of learning environment and student's academic performance adopted the activity theory. He argued that activity theory is suitable for understanding the theory is a tense in qualitative research methodologies; it provides the understanding and analysis of phenomenon, finding patterns and making inferences across interactions.

This study therefore, adopted the activity theory because it involves the investigation of student's mental capabilities; analysis and teaching method affect student's academic performance.

### CHAPTER THREE

### RESEARCH METHODOLOGY

### 3.1 INTRODUCTION

This chapter looks at the research method employed to accomplish this study. It also appraises the instruments used, the data gathered and the application of statistical method in evaluating it.

### · 3.2 RESEARCH METHOD

The method adopted for carrying out this research included the use of questionnaires as instrument of collecting data, and survey of teachers and students to retrieve information.

Thomas and Nelson (1990) stated that this form of survey is a descriptive survey and it seeks to determine present practice or opinion of the entire population. Furthermore, some lecturers and students. Data were also sorted from student's examination records in the examination office.

### 3.3 STUDY POPULATION AND SAMPLE

From the total population of 121 students of one hundred level (100L) 2013/3014 in integrated science department of Niger State College of Education, a sample of one hundred students will be taken. The intention to choose the sample size is based on the observation of Ali (1996) that sample

size is extremely important because of the ability of the researcher to handle, manage and control the sample of the population.

The samples were randomly selected as suggested by Nwogu (1991) that sample random sampling technique is concerned with respondents which the researcher can reach are included in the study. Ibrahim (2006) added that this type of sampling ensures that each individual in the group has equal and independent chance of being selected.

#### 3.4 SOURCES OF DATA

There are two basic sources of data used by the researcher in obtaining valuable information.

- a. Primary sources:- Responses of respondents to questionnaires provided
- b. Secondary sources:- Data of students performance in examination.

#### 3.5 METHOD OF DATA COLLECTION

To adequately evaluate the impact of the impact of teachers teaching method on the academic performance of students, the use of questionnaires was imperative. Oral interview of lecturers to ascertain the teaching methods they imbibed.

Data will also be collected from examination office to study students performance.

## 3.6 TECHNIQUES OF DATA ANALYSIS

Both primary and secondary data analysis obtained in raw figures. These data therefore must be treated to generate information. In the course of this research work however, data will be presented in table form and percentage.

### CHAPTER FOUR

### DATA PRESENTATION AND ANALYSIS

### 4.1 INTRODUCTION

In this chapter, the researcher intends to asses the impact of the teachers teaching method on the academic performance of students of integrated science, Niger State College of Education, Minna.

### 4.2 PRESENTATION OF DATA AND DATA ANALYSIS

For the purpose of obtaining data for the research, questionnaire was distributed to the students of integrated science (100 level NCE 2013/2014 session) at Niger State College of Education, Minna.

Table 1.1 RESPONSES OF RESPONDENTS

| TEACHING METHODS                                    | RESPONSES BY STUDENTS | PERCENTAGE |  |  |
|---|-----------------------|------------|--|--|
| Teacher-centered approach                           | 27                    | 27.7%      |  |  |
| Student centered approach                           | 42                    | 41.2%      |  |  |
| Direct instruction method                           | 6                     | 5.9%       |  |  |
| Inquiry based method                                | 2                     | 2.0%       |  |  |
| Teacher centered and direct instruction method      | 1                     | 1.0%       |  |  |
| Co-operative learning method                        | 8                     | 7.8%       |  |  |
| Students centered approach and inquiry based method | 4                     | 3.9%       |  |  |

| Teacher centered approach and direct instruction method   | 3 | • | 2.0% |
|---|---|---|------|
| Co-operative learning<br>method and inquiry based<br>method<br>Direct instruction method<br>and co-operative method | 3 |   | 2.9% |

### SOURCE: QUESTIONNAIRE ADMINISTERED 2015

From the 100 students selected 98 of them returned the questionnaire.

#### 4.3 DISCUSSION

From the total of one hundred students of integrated science students selected, 98 of them returned the questionnaire 27.7% of them understood teacher-centered approach of learning 4.2% found student-centered approach of learning easier to understand.

As regards direct instruction method, 5.9% of the respondents prefers it, 2.0% of them. The research shows that only 1.0% of the students perceived both teacher, centered and direct instruction methods to be easily understood.

7.8% of the students concede that co-operative learning method is more understandable student, centered approach and inquiry based method is more

understood by 3.9% of the students. While 2.9% of the students found both cooperative learning method and inquiry based method more understanding, 2.0% of the students preferred direct instruction method and co-operative learning method.

Teacher-centered approach and direct instruction method were most appreciated by 2.9% of the students that responded. From the above analysis, the highest percentage of students that responded. Understood student-centered approach of teaching most.

### 4.4 HYPOTHESIS TESTING

The hypothesis of this research will be tested using chi-square.

HO, teachers teaching method has no significance effect on the academic performance of students. The above hypothesis can be tested using the data in

Table 1.1

Which of the following teaching methods adopted by your lecturers did you understand most?

| TEACHING METHOD                         | FREQUENCIES  |            |  |
|---|--|------------|--|
| Teacher-centered approach (TCA)         | TALLOUENCIES   | PERCENTAGI |  |
| PProducti (ICA)                         | 27   | 27.7%      |  |
| material man                            |  |            |  |
| Student-centered approach (SCA)         | 42   | 41.2%      |  |
| Direct instruction method (DIM)         | 6  | 5.9%       |  |
| Ínquiry based method (IBM)              | 2  | 2.0%       |  |
| Teacher centered and direct instruction | 1  | 1.0%       |  |
| Co-operative learning method (CLM)      | 8  | 7.8%       |  |
| o-operative learning method (02.17)     |  |            |  |
| tudent centered approach and inquiry    | 4  | 3.9%       |  |
| ased method (SCIBM)                     | and the state of t |            |  |
| o-operative learning method and inquiry |  | 2.9%       |  |

| ased method (CLM IBM)                                    |    |       |  |
|--|----|-------|--|
| Direct instruction method and co-                        |    | 2.0%  |  |
| operative method (DIMCM)                                 | 2  | 2.078 |  |
| Blanch and American Company                              |    |       |  |
| Teacher centered approach and direct instruction method. | 3  | 2.9%  |  |
|  | 98 | 97.3% |  |
|  |    |       |  |
| Total  |    |       |  |
|  |    |       |  |

SOURCE: QUESTIONNAIRE ADMINISTERED 2015.

### TABLE 1.2 HYPOTHESIS TABLE

| QUESTIONNAIRE | TCA | SCA | DIM | IBM | CLM | SCAIBM | CLMIB | DIMIBM | TCADIM |
|---------------|-----|-----|-----|-----|-----|--------|-------|--------|--------|
| FREQUENCIES   | 27  | 42  | 6   | 2   | 8   | 4      | 3     | 2      | 3      |
| REQUENCIES    |     |     |     |     |     |        | L     |        |        |

SOURCES: QUESTIONNAIRE ADMINISTERED 2015.

NOTE:

TCA: Teachers-centered Approach

SCA: Students- Centered Approach

DIM: Direct Instruction Method

IBM: Inquiry Based Method

TCDI: Teachers centered and direct instruction approaches

CLM: Co-operative learning method

SCAIBM: Students centered approach and inquiry based method

CLMIBM: Operative learning method and inquiry based method

DIMIBM: Direct instruction method and inquiry based method

TCADIM: Teacher-centered approach and direct instruction method

$$TCA = 27x98 = 13.5$$

196

$$SCA = 42x98 = 21$$

196

DIM: 
$$6x98 = 3$$

196 .

$$SCAIM = 4x98 = 2$$

196

$$IBM = 2x98 = 1$$

196

$$TCDI = 1x98 = 0.5$$

196

CLM: 
$$8x98 = 4$$

• 196

196

DIMIBM= 
$$2x98 = 1$$

$$T\underline{CADIM} = 3x98 = 1.5$$

TABLE 1.3 CHI-SQUARE TABLE

| TEACHING<br>METHODS | F  | E    | (F-E)  |        |           |
|---------------------|----|------|--------|--------|-----------|
|                     | 27 |      | (I'-E) | (F-E)2 | (F-E) 2 / |
| TCA                 | 27 | 13.5 | 13.5   |        | Æ         |
| SCA                 | 42 | 21   |        | 27     | 2 .       |
| DIM                 | 6  | 3    | 21     | . 42   | 2         |
| IBM                 | 2  | 1    | 3      | 6      | . 3       |
| TCDI                | 1  | 0.5  | 1      | 2      | 2 .       |
| CLM .               | 8  | 0.5  | 0.5    | 1      | 2         |
| SCAIM               | 4  | 2    | 4      | 8      | 2         |
| CLMIB               | 2  | 1,5  | 2      | 4      | 2         |
|                     | 3  | 1.5  | 1.5    | 3      | 2         |
| DIMIBM              | 2  | 1    | 1      | 2      | 2         |
| TCADIM              | 3  | 1.5  | 1.5    | 3      | 2         |
|                     |    |      |        |        | 21        |

The degree of freedom from the observation frequencies is calculated thus;

$$DF = (R-1)(C-1)$$

Where; DF= Degree of freedom

R= Number of rows

C= Number of columns

From the above table, R=5, C=2

(R-1)(C-1)

(5-1)(2-1)

Using 5% level of significance, under the degree of freedom of 4, the chi-square table gives the value of 9.488. Therefore, chi-square calculated value of 9.488. Therefore, chi-square calculated value = 21 as shown in table 1.3, but the chi-

square critical value is 9.488.

#### DECISION RULE

If the calculated chi-square is less than the critical value, the null hypothesis would be accepted and the alternative hypothesis is rejected. However, if calculated value is greater than or equal to the critical value, then the alternative hypothesis is accepted while the null hypothesis is rejected. Based on the above decision rule, the calculated value is greater than the critical value of 9.488. Hence, the null hypothesis formulated is rejected, and it is conducted with 95% level of confidence that teachers teaching method has significant on students academic performance.

This finding concure with tailor and francis (2003) who said, while teachers and students play an equally active role in the learning process. The teachers primary role is to coach and facilitate students learning and overall comprehension of material. Student learning is measured through both formal and informal forms of assessment, including group project, student portfolios and class participation. Teaching and assessment are connected, student learning is continuously measured during teacher instruction. These students had higher scores in the courses that their lecturers adopted student-centered approach.

### CHAPTER FIVE

# SUMMARY, CONCLUSION AND RECOMMENDATION

#### 5.1 SUMMARY

To adequately investigate the impact of teachers teaching method on the academic performance of students, the researcher collected data form 100level student of integrated science of Niger State College of Education Minna. The result of the findings show that teachers teaching method has significance impact on the academic performance of students.

#### 5.2 CONCLUSION

From the analysis in hypothesis testing, we observed that teachers teaching method has a significant impact on the academic performance of students.

From the teaching methods adopted by teachers, student centered method was the best teaching method that has greatest impact on the academic performance of students while teacher centered method is the least teaching method for the students of 100 level in integrated science department of COE, Minna.

### 5.3 RECOMMENDATION

In view of the vital role teachers teaching method have on the academic performance of students; the following recommendations will be vital.

- Teachers should be able to identify which teaching method yield better performance of the students.
- 2. Schools should engage in teachers training and workshops on teaching methods to be adopted for students.
- Integrated science teachers should adopt student-centered teaching method.
- At the end of session or semesters, investigation of students should be made to know which teaching method they understand most.

- J.S and Y.S (2002), Effect of teaching method choice, discipline and REFERENCES students multi-pages publishers, pp 24-27.
- oju, T.L. (2006). Impact of teachers teaching method and teaching materials on the performance of students. Sarah and co. Publishers pp 99-107.
  - academic performance of students, Ego booster books, Ogun State, Nigeria (2011). An analyzing of the relationship between class size and anya, F.N (2006) Analyzing teachers teaching method in London. Pg 43. pp 98-109... nola, O.
- Nigeria secondary schools. World journal of education 1 (2) 143-149.

ni, A.J. (2011). Teachers professional development and quality assurance in

- teachers and its relationship with academic achievement of third grade , R. (1996). Evaluation of different methods of interaction between students and students in West Azarbaijan. Pp 18-34.
- enhance classroom instruction. Paper presented at the annual performance of primary school pupils in Ijebu-Ode local government area of Ogun State. Pp Smith, M.S and Stein, M.K (2001). Linking teacher support to own, C.A,
  - busari, O.O (1991) sustaining students interest in science, influence of cognitive and teacher variables. Science Teachers Association of Nigeria 27 (1) 7-18.
    - Grasha A.F. (1996). Teaching with style, California Alliance Publishers.

- Nelson, J.R, Benner, G.J, Lane, K and Smith B (1990). An investigation of the characteristics of students with comorbid emotional disturbance and 25-33.
- Nwogu, K.N. (1991) structure of science popularization, a genre-analysis approach to the scheme of pp 54, 59.
- Omotere O. (2011). The impact of teachers teaching method on the academic performance of primary school pupils. <u>Journals of education</u>, pp 36-42.
- Taylor, C.S (2003). Washington, assessment of student learning, grade 4, 1999, technical report. Olympia, WA. Office of the superintendent of public instruction. Pp 12-18.
- Thomas and nelson [1990] becoming a good teacher. Reflective practice with regard to children voice, journal of teacher education, 49[5], 372-380.
- Tailor and Francis [2003] who said communication language in the classroom describe the assimilation and to solve all problem. journal of language pp 25
- Lavy [2001] evaluate the case method journal education [pp.41-51].
- Ibrahim (2006) Based approach as an effective tool for teaching verbal iran and published [pp 21-32]

### SECTION A QUESTIONNAIRE

| COESTIONNAIRE   |
|---|
| This questionnaire is set by the students carrying out research work on the topic "The impact of the teachers teaching method on the academic performance of students of integrated science" S case study of 100 levels N.C. F. 2013/2014 section   |
| Research questions to be ticked on appropriate by the students of the department.   |
| Name:   |
| Admission Number:   |
| Combination:  |
| Level:  |
| SECTION B   |
| Which of the following teaching method adopted by our lecturers did you understood most?  |
| 1. Teacher-centered approach to learning 2. Student-centered approach to learning 3. Student-centered approach to learning 4. Teacher-centered approach to learning 5. Student-centered approach to learning 6. Student-centered approach to learning 7. Student-centered approach to learning 8. Student-centered approach to learning 9. Student-centered approach to lear |
| 3. Direct-instruction method 4. Inquiry-based learning method 5. Teacher-centered approach to learning and direct instructions method  . Inquiry based learning method  |
| 6. Co-operative learning and inquiring saddlearning method  |
| 6. Co-operative learning method and inquiry-based learning method  7. Students-centered opproach to learning and inquiry-based learning method  8. Co-operative learning method and co-operative learning method  9. Direct instructions method and co-operative learning and direct instructions method  |
| 9. Direct instruction   |

10. Teachers-centered approach to learning and direct instructions method