

**PERCEPTION OF BIOLOGY UNDERGRADUATE STUDENTS ON  
THE INFLUENCE OF FIELD TRIP ON THEIR ACADEMIC  
ACHIEVEMENT**

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## CERTIFICATION

We the undersigned, certify that this research work was carried out by **Uchechukwu Cynthia EZEH** with Matriculation Number **EDU1702542** in the Department of Curriculum and Instructional Technology, Faculty of Education, University of Benin, Benin City, Nigeria in partial fulfillment of the award of B.Sc. (Ed) in Biology.

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## **DEDICATION**

This work is dedicated to GOD Almighty who made it possible for me to complete this programme successfully and to my wonderful parents for their undoubted love for me.

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## ABSTRACT

This work was carried out to find out the perception of Biology undergraduate students on the influence of fieldtrip on the academic achievement. Four research questions were raised to guide the study.

The descriptive survey research design was adopted for the study. The instrument used for gathering data from the selected sample was a questionnaire. The Cronbach Alpha method was used to determine the reliability which yielded coefficient of 0.71. A total of 249 biology students (300-400level) in the University of Benin constituted the population of the study. The sample size consisted of 100 students drawn from the population of the study. The data collected were analyzed using descriptive statistical mean and standard deviation.

The findings of this study showed that students' academic performance would be enhance when student centered learning through field trip is used. The study found out that students learn better when they are allowed to participate actively in class by interacting with the lecturer and the colleagues. Students had a positive perception about the use of field trip in the instructional process as they were expressed. The positive perception of students on the concept and the used of fieldtrip in the instructional process accelerated an enhancement in the academic performance. Based on the findings, it was recommended that the use of field trip strategy should be encouraged and enforced in teaching biology at tertiary level. Lecturers should encouraged to use field trip strategy in teaching biology since it encourages participation and retention of scientific concept. The use of fieldtrip should be introduced to prospective lecturers in courses such as special teaching methods, instructional technologies etc.

## CHAPTER ONE

### INTRODUCTION

#### **Background of the Study**

Biology is a science course offered by students at both secondary and tertiary level of education. The word ‘Biology’ comes from Greek words; Bios meaning life, and logy (logia) which means study Ezemoka (2011). Biology is also a branch of science which has been structured to equip the students with the knowledge of relevant concepts and scientific skills Adepoju (2016). Biology is now a standard subject of instruction at schools and universities around the world and over a million papers are published annually in wide array of biology and medicine journals, (crystal 2011). Biology is one of the three pure sciences that deal with the study of all the varied aspects of living organisms; it involves every living thing for the understanding of its structures and functions of elements and life component in both single and multiple cell, including humans, plants and animals.

The cardinal objectives of biology education are to prepare students to acquire: adequate laboratory and field skills in biology; meaningful and relevant knowledge in biology, ability to apply scientific knowledge to everyday life in

matter of personal and community health and agriculture and lastly reasonable and functional scientific attitudes (Federal Ministry of Education 2004). The study of Biology among undergraduate students in tertiary institutions in Nigeria can equip students with useful concepts, principles and theories that will enable them face the challenges before and after graduation. According to Okeke (2000), Students who do well in Biology could have prospects of becoming: doctors, nurses, pharmacists, dentist, Biology lecturers, medical technologist, food technologist, genetic engineers, microbiologist, biochemists etc.

Due to the importance of Biology to man, effective teaching using appropriate instructional strategy is crucial in order for students to reach educational success in and outside the classroom setting. But over the years, there have been so many factors militating against effective teaching of Biology in tertiary institutions, in which some of these problems of effective teaching of Biology makes learning difficult for students as many concepts /topics in Biology which includes: water transport in plants, respiration and photosynthesis, gaseous exchange, energy, cells, mitosis and meiosis, plant taxonomy, physiological processes, hormonal regulation, oxygen transportation,

genetics, and central nervous system can be perceived as difficult to learn by undergraduate students.

Experiencing difficulties in so many topics in Biology, negatively affects student's motivation and achievement. This has stimulated researchers to investigate why students' experience such difficulties and how to overcome them. Concepts in Biology are important in that they are included in the curriculum of many countries of the world due to its importance to life. But many students have various misunderstandings due to the difficulty of the course; hence have developed misconceptions about it. The concepts and topics of Biology taught in the tertiary institutions where Biology is offered in the curriculum as add-on knowledge that students need to know.

One of the main objectives of Biology is the provision of orientation on basic scientific skills with which to start a life of work for those who may not undergo further studies. In spite of these encouraging and laudable objectives, the Biology students' perception towards this promising discipline seems not to be encouraging. The student appears not to be interested in the course hence the need for this study: the perceived impact of teaching methods on the academic performance of Biology students in University of Benin. The

perceived poor perception on the teaching methods used by lecturers in the instructional process and its influence on their academic attainment. Biology students in Biology programmes has been observed to have obnoxious perception on the lecture methods used by lecturers in the teaching of the course which invariably has become a serious concern to many Biology students and other stakeholder in Nigeria and it is for this reason this study is embarked upon Perception could be described as the outcome of one's impression about something or better stills, one's views and disposition of something. Pearson (2010) defined perception as someone's opinion and feeling about something or someone especially when this shows the behavior. Perception can also be defined as an internal state that influence the personal actions of readiness. It can then be adjudged at one's perception to something manifests in the way he/she would respond to issues that pertain to the thing. This is applicable to learning, especially in Biology, which involves full concentration of learner attention. Thus, the perception of teaching methods utilizes by Biology lecturers contribute immensely to the academic progress of students.

Odoh (2014) observed that the perception of Biology students towards Biology might be caused by methods of teaching. He also observed that many

classroom lecturers still use poor teaching methods which does not arouse the interest of the students such methods include; lecture methods (chalk talk methods) which is mostly lecturer oriented. This method, according to Odoh seem not to motivate the student and does not contribute to the child acquiring the acquired element of pre-scientific skills.

The teaching of Biology courses requires application of different methods to make it interesting and meaningful. These methods include the use of different teaching methods, and application of these methods in the teaching and learning process. The teaching methods could be discussed, demonstrated, group teaching or question and answers. Nwachukwu (2018) describe teaching methods as decisions about organizing students' materials and ideas to provide learning. Therefore, every lecturer must device a means or develop strategies that could make students develop interest in the course matter. Nwachukwu further stated that lecturer needs to be vary in their teaching methods in the different classroom situation.

In furtherance of the above, the use of single approach in teaching Biology could cause boredom and unruly behavior in the classroom, in the light that Offorma (2014) observed that lecturer that employs different resources and

teaching methods to teach students of different ability and interest tends to be productive. The lecturer of Biology should try to make class activities interesting to the students. Making use of variety of methods like discussion, demonstration, play away, and group work, to teach a particular course matter can help attract and maintain the interest of the students to take active part in the course. The implication of this in teaching Biology is that it would affect the perception and learning behavior of student positively.

Teaching is seen as an attempt geared towards assisting the learners to change his behavior in a specific context. This could be change of perception, knowledge, idea, skills or appreciation (Panvk, 2006). The quality of student in any particular country according to Aina (2012) is proportional to the quality of her citizenry. Lecturers are the foundation of any good education programme if the lecturer are poorly preparing the educational programme no matter how well structured would be shaking and unstable, for the fact that Biology course is more of practical and should be taught practically, the comparative education and adaptation centre (CESAC, 2006) committee on Biology consideration to the issue of teaching methods.

Various teaching methods and strategies have been adopted by lecturers in the teaching of Biology that aimed at bringing about meaning learning and mastery of concepts. These methods include lecture, demonstration, discovery, project, inquiry among others. The lecturer centered methods traditional lecture methods of “talk and chalk” is the most widely used methods as revealed by literature and researcher’s observation, where the lecturer give some example on the board and students copy these example into their exercise books and then later gives some problems to solve based on the example given or better still lecturers stand at the front “ their student about science concept which observably result on poor communication of science concept to the students and students on their part finding it difficult to learn these concepts ( Oludipe and Oludipe, 2010, Omoifo, 2012).

Lecturer mostly are observed to employ these methods because of some advantages which include large content coverage and for the fact that it can be used for large class which one of the prevailing features of most tertiary institutions. In spite all these advantages, the lecture methods use in the teaching of Biology and other science programmes has some weaknesses,

which has been identified to be one of the causes of the poor perceptions and retention of concepts in the programmes.

It has been observed that effective teaching may facilitate and meaningful learning (Omoifo, 2012). In other words, poor teaching would naturally lead to poor learning and consequently poor achievement and perception. The basic factors responsible for student's perceived poor achievement and perception can be grouped into faculty related factors. These factors include the instructional materials used, the traditional lecture method mostly due to poor knowledge and lack of exposure to other learners could lead to poor achievement and perception in Biology in Nigeria.

Among the above teaching and learning strategies, one area that has not been fully explored is the use of field trips. Field trips were first created by Brenda Keogh and Naylor in 1991, while a brief of its outline strategy was first published in 1993, which is approximately 20 years ago. Since then, research and feedback from lecturers and students have led to a variety of improvements in the formative knowledge of the students.

The use of field trips in diagnosing and remedying misconceptions in science is not new, but not as old as man. A number of studies have been

carried out to find out the effectiveness of field trip in diagnosing and remedying misconceptions. Therefore, in this study, the effectiveness of field trip on the academic achievement of students and understanding of concepts in Biology among undergraduate students was explored.

Field trips are demonstration – style instructional method that put forward a range of viewpoints about an everyday event. Tal and Morag (2009) described field trips as student experiences outside of the classroom at interactive locations designed for educational purpose. trips are successful instructional strategies because they are visually appealing and stimulate students' involvement in the lesson, and more importantly, they identify and eliminate students' misconception. Feedback from learners is used for further development of more field trips.

Meaningful learning takes place when new concepts are integrated with relevant pre-existing cognitive structure in which without this integration will result to rote learning. For there to be meaningful learning, the following three conditions must be met;

- (a) The environment context must encourage meaningful learning and conceptual change.

- (b) Students must have the appropriate motivational attitudes and behaviour.
- (c) Students must have the appropriate prior knowledge and cognitive skills and strategies. When any of the three conditions is missing, rote learning occur, and students who frequently employ rote learning tends to generate misconceptions concerning scientific concepts.

In the use of field trips, the students take the roles of the instructor for out of -class discussion which enable them participate fully and in control of whatever they are learning (i.e., mind on, hands on and heart on) in which constructivist approach to learning come to play. Field trip are based on everyday situation that don't appear to be scientific, so students lacking in confidence are less likely to be intimidated by science and more likely to engage with them. All these day-to-day situations appear to be effective across geographical and cultural boundaries, enabling field trip to be used successfully in a wide range of countries of the world so that they can be used independently by learners if the lecturer permits it.

In Nigeria, not much work has been done in the sciences using field trip, while in the Western world; few studies were carried out by Brenda Keogh and Staut This is the more reason while the researcher tried to explore this area

using survey study, as previous studies suggest that field trip are effective in diagnosing and remedying the misconceptions related to concepts and topics in Biology besides promoting, motivation and participation in learning science.

### **Statement of the Problem**

Biology is a science course offered in life science classes of the tertiary institutions and the objectives of the course is for students to acquire basic scientific skills in Biology, ability to carry out simple practical and experiments and to be able to comprehend basic concepts and principles of science. In spite of this, a close study of the analysis of trends of sessional examination result in Biology revealed that the number of credit passes were low. These results seem to have remained the same over the years irrespective of the number of enrollees each year without improvement.

The persistent poor performance of students in Biology as well as science process skills acquisition exhibited by Biology students in sessional examination leave one in doubt about the effectiveness of the teaching method popularly used by Biology lecturers for teaching the course (Agbonlahor & Igbineweka, 2017).

Reason advanced for the poor performance of students were poor understanding of basic principles and concepts, inability to apply Biology concepts to real life situations, poor comprehension, lack of adherence to the rules, quality drawings, poor spellings, inability to identify specimens, un-equipped schools and unsupportive attitudes of parents. The above-mentioned problems are pointer to serious cognitive problems in Biology generally and concepts and topics taught in Biology particular. Also from sessional examinations statistic, shows the percentage failure of students in Biology in several departments offering the course.

Poor performances in Biology is a clear indication of shallow knowledge of the concepts, methodology adopted by lecturers in the instructional process. For the fact that concepts in Biology is simple and concise to assimilate, students' performance ought to be very high. But over the years reviewed, the reverse is the case; performance in the course has dropped significantly.

Consequent upon this, Biology students that intends to further their education in this line of course and its related areas may be discouraged. Their ability to acquire the basic theoretical knowledge and skills in scientific works and experiments which led to their poor performance of students will prompt

them to venture into other course areas like the arts and social sciences, where they can be functional (Cimer, 2017). This in turn will likely affect scientific development in the country if not controlled. From experience, it is observed that the lecture method is predominantly used in the teaching of Biology and it has a disadvantage of not achieving the desired learning outcomes because it does not connect the fact it presents to reality.

Ahmet and Ahmet (2018) reported that students are mostly unsuccessful in science related course because of constant use of traditional lecture method. This method of teaching propels learning difficulties which make it a problem for students to link concepts learnt in class to reality because the lecture method does not produce connective learning but factual presentation of topics. These methods, it has been observed tends to retard students' interest in Biology thereby leading to poor academic performance.

### **Research Questions**

The following research questions will guide the study:

1. How do Biology students in the University of Benin perceive Field trip as an instructional method?

2. To what extent does the perception of Biology students about Field Trip in the University of Benin influence their academic performance in the course?
3. To what extent does the perception of Biology students about Field Trip in the University of Benin influence their comprehension of Biology topics?
4. What is the influence of field trip on the academic performance of students in University of Benin?

### **Purpose of the Study**

The purpose of this study was to determine the perception of students about Field Trip and its influence on their academic performance. The specific objectives will be to:

1. determine how Biology students in University of Benin perceive Field Trip as an instructional method.
2. determine the extent to which the perception of Biology students about field trip in the University of Benin influences their academic performance in the course.
3. determine the extent to which the perception of Biology students about Field Trip in the University of Benin influences their comprehension of Biology topics.

4. determine the influence of field trip on students' academic performance in the University of Benin.

### **Significance of the Study**

It is envisaged that a careful identification of perception of students on field trip and its influence on their academic achievement in Biology would provide relevant stakeholders in education, government and others with possible means of improving lecturers' quality with regards methods employed in teaching Biology that would positively enhance students' academic achievement in both internal and external examination.

This study would help Biology and other educators on the merits and demerits of the various teaching methods and lead to improvement of their instructional delivery in order to foster students understanding with resultant effect on high academic achievement. The study would help school administrators to have a better understanding of lecturers' method of teaching and students' academic achievement in biology. This will assist the school principal in ensuring that the objectives of teaching and learning are realized with the minimal input of score resources at the principals' disposal which is caused by the dwindling revenue of tertiary institutions.

The study would also provide information to curriculum planners such as the Federal and State Ministries of Education and National University Commission (NUC) on the need for in service training and re-training which will be in the form of seminars, workshops, and symposia to be abreast of the advantages of other teaching methods and the need to incorporate them into the teaching learning process.

Furthermore, the study would also help lecturers generally to see the need to improve their knowledge on their job, by way of attending seminars, workshops or getting additional qualifications so as to appropriately have more positive impact on their students'. It is a known fact globally that no nation rises above the level of her lecturers. This brings to bear the necessity for lecturers to improve, in fact constantly improve the academic job performance on academic capabilities as this go a long way in making a positive impact on students' academic achievement in biology. This study would provide the lecturers and educational policy makers with information of the need to enact good policies that would enhance lecturers' job performance (in terms of their methods of teaching biology) in our undergraduates.

Academic achievement has been variously defined as a level of proficiency attained in academic work by any student, this study will help undergraduate students to have knowledge of the criteria of promotion to the next class, because their academic achievement in school is an index for the next level of their academic pursuit and overall future success in life. It will also help the students on their personal self- evaluation in the overall teaching and learning process.

In addition to that, students' centered strategy (field trips) would serve as a platform for individual and team development of students in the three domains of learning. This will result in active participation and mastery abstract concepts, hence increase their level of retention. The interactions with materials and manipulations of objects and equipment will boost the students' interest in biology. It will not only result in mastery of practical skills but students' eagerness to read materials/text books on Biology which subsequently increase their performance. Lastly the findings of the study would hopefully add to existing literature by extending the academic bank of knowledge on the variables that influences students' academic achievement and lecturers' teaching method in the tertiary institutions. It would also provide some useful

reference materials future researchers who might be interested in conducting similar studies elsewhere.

### **Scope and Delimitation of the Study**

The scope of this study is geared towards perception of biology undergraduate students on the influence of field trip on their academic performance. The study will be delimited to 300- 400 level undergraduate Biology students in the Faculty of Education, University of Benin, Benin- City in the 2019/2020 academic session.

### **Definition of Terms**

**Field trips:** are excursion-style instructional methods that put forward a range of viewpoint for students about an everyday event outside the classroom.

**Concept:** an abstract or a general idea inferred or derived from specific instances.

**Conception:** the power of recalling a past sensation or perception. Something conceived e.g., notion, idea, design or plan.

**Perception:** This refers to a person's disposition of attitude towards something.

**Misconception:** a belief that contradicts scientific theory.

**Academic achievement:** This is the level of attainment of students in a particular course.

**Conceptual Understanding:** is a reflection of students' ability to reason in settings involving the careful application of concept, definitions, or representations.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

This chapter reviewed related literature under the following sub-headings:

- Concept of Field Trip
- Concept of Academic Performance
- Students Perception of Field Trip and Academic Performance
- Summary of Related Literature Reviewed

#### **Concept of Field Trip**

Field trips are important in teaching in the following ways: Field trips snatch attention in both children and adults ( in order to gain the attention of learners towards learning, the use of Field trips will be great idea), Field trips leads to superior understanding, as topics that cannot be theoretically understood need practical experiences/real life examples, Field trips can make learners artists (as they draw most of these cartoon by themselves, they become part of them), increase their thinking level, improve students-Lecturer relationship, as they are used by the lecturer to teach the learners, since they are eye-catching, they bring the dull pages of the books and the hidden secrets of the courses into life (Michael & Wyk, 2017).

In the conventional teaching methodology, knowledge was imparted to students via systematic conversation or discussion. But in our today generation, since learners especially children scrutinize almost everything with so many queries, the conventional scheme of teaching flops. These present the need of new techniques for teaching which is some time achieved by the use of Field trips or comic strips and now Field trips. Since field trips have proven themselves to be very advantageous for educating children, in-order to use them across all level of education, there is the need to mix it with the concepts of taught, the reason why the researcher explored the use of concept Field trips in teaching and learning in secondary schools.

The various types of Field trips are political, illustrated, gap, comic, book/serial, commercial, feature length animated and television Field trips. In this research, excursion Field trips effects are investigated. Excursion Field trips refer to a cartoon which is created by sequential photographs from drawn patterns and shows continuous movement (Dhangsubhuti, 2016).

Excursion Field trips were introduced in 1991 by Staut Naylor and Brenda Keogh. These were initially used as a strategy to elicit learners' ideas, to challenge their ideas and to provide insights into how these ideas are developed

(Keogh and Naylor, 2019). Excursions Field trips as teaching and learning materials are often used by researchers while studies reveals that they are effective in diagnosing and remedying the misconception related to concepts and topics in Biology, besides promoting motivation and participation in learning science (Chin & Teou, 2019). In the study performed by Ekici, Balim, Vohs & Baumeister, (2017), 24eighth grade students were interviewed to determine what misconceptions they had about photosynthesis. Concept Field trips were developed to help students think about the possible explanations for the specific concept like food sources of plants. The class discussions allowed students to hear multiple explanations and challenge their own reasoning. Ekici et al (2017) found that after the class discussion, all students were able to correctly identify food sources for plants. They also found that most students overcame their misconceptions in the topic of photosynthesis.

In a study to analyses the effect of field trip on academic achievement and inquiry learning skills Balim, Ekici, Baumeister & Vohs (2017), eighty-eight students attending the 11<sup>th</sup> grade of Amalasya Social Science High School in 2015 – 2016 semester, out of which 44 were assign to the experimental group and another 44 to the control group of the same school, revealed the same level

of academic achievement. Using Field trips in 7<sup>th</sup> grade science lesson, Balim, Inel and Evrek (2018), found that Field trips influenced inquiry-based learning skills.

In their study of science education using Field trips, Keogh and Naylor (2019), concluded that Field trips were influential in discovering students' views through discussion, in developing their ideas, in ensuring high levels of involvement and motivation, and encouraging students to do research. In their study, Chong Li Young & Ch'ng ZheeKee, (2017), Utilizing Field trips to Diagnose and Remediate Misconceptions Related to Photosynthesis and Respiration in plants among Primary School Students, 29 year 4 pupils were taught photosynthesis Male's respondents constituted 1.38% (12) of the samples. Also, 11 of the respondents were higher achievers 37.93%, eight were intermediate learners 27.59% while 10 were slow learners 34.48%, and the result from this purely qualitative research revealed that Field trips are effective in diagnosing and remedying misconceptions.

This is also evident in a recent research by Keogh & Naylor (2017) that concept Field trips can stimulate argumentation and promote change in professional practices of the student's lecturer in the following ways:

Firstly, Field trips and Research into Aspects of Student learning. Field trips makes learner's find themselves in the role of an adjudicator that is they make judgments about the ideas that other people hold, which usually is the role of the lecturer about learner's idea. To (Dweck, 2017), one of the consequences of lecturers making judgments about learners' ideas is that learners tend to avoid risk of being wrong, less confident, low achieving learners hold on to their ideas. But taking on the role of adjudicator, empowers learners since they are doing the judging rather than been judged by the lecturer, which geared them into argumentation and put forward their ideas more readily (Solomon, 2019)

Field trips are not identified exclusively with formal learning settings. They can bridge the gap between formal and informal learning settings because they are based around everyday situations that appear to involve ordinary characters doing ordinary things. They have been used in informal settings like corridor display in schools, parents' open evenings at school and exhibits at school exploration centres, in UK at professional football matches in match days, also in countries like Sweden and Russia for engaging members of the public everyday thinking about scientific problems (Naylor & Keogh, 2019 b).

Gunstone, (2018), noted that the methods used to probe students' ideas/beliefs are also almost by definition, excellent teaching/learning strategies, and Field trips play this role. It can also be a valuable tool for developing learners' ideas as it engages them in discussion and in trying to justify their ideas, their views are exposed by the challenge of their peers. And according to (Chin Teou, 2018, Dolasir, 2017;' Ekici, & Aydin 2017; Kabapinar, 2015; Rahmat, 2019; Stephenson & Warwick, 2002), opined that this will not only challenge students' misconceptions but can also go a long way to help remedy these misconceptions.

Field trips motivate groups of learners of all ages and backgrounds and in a variety of circumstances, include students who have emotional and behavioral difficulties. Repeated use of the Field trips strategy does not appear to reduce the level of engagement of learners, but rather rescue students from boring traditional teaching (Birsici, Metin & Karakas, 2017). Field trips aid problem-solving and to gain access to students believe about learning environments and their preferred approaches to science teaching and learning (Sexton, Gervasoni & Brandenburg, 2019). Several benefits have been found in the use of Field trips, including developing language skills, engaging students in higher order

thinking skills, creating interactive learning environments, auditing courses knowledge of student lecturers, and as an effective stimulus for argumentation (Naylor & Keogh, 2012).

### **Studies on Students' Achievement**

Achievement is the act of performing and obtaining by exertion (mental effort): a successful performance or an accomplishment. It is a great or heroic deed, something accomplished by valour (value, bravery, worth, courage etc.) or praiseworthy effort and boldness (oxford learners' dictionary, 8 Ed.) Academic achievement or performance on the other hand is the extent to which a student, lecturer or institution has performed their short- or long-term educational goals. Examples are cumulative GPA and completion of educational degrees such as high school and bachelor's degrees. It is commonly measured through examinations or continuous assessments but there is no general agreement on how it is best evaluated or which aspect is most important (Doumen & Buyse, 2016).

The following are factors that can influence academic achievement:

1. Socio-demographic characteristics: Consist of the students' age, gender, mental status and ethnicity. The younger the students in terms of age, the

- better the performances, while the older the student, the lower the performance.
2. Individual's differences: This has to do with differences in intelligence and personality. The higher a student's mental ability that is IQ and consciousness as well as mental curiosity the better the academic achievement.
  3. Socio-economic status of parents: Academic socialization can be influenced by parents' socio-economic status by shaping their skills, behaviours and attitude toward school, as highly educated parents tend to have more stimulating learning environments and develop self-efficacy among adolescence-age-children, which will in-turn affect their academic performance. From recent studies, physical activities can also increase neural activity in the brain, make it function properly for better academic work.
  4. Psychological factors: Include variables that affect the state of the mind and its process. For example, motivation (orientation), sleep and perceived stress, lack of appropriate role model may affect students' academic achievement.

5. Motivation: Is the reasons behind an individual's action. According to research, students with high academic process are students who are motivated and persisted; such students do better than the lower ones. Good food, environment, background etc. are some of the things that motivate students to learn.
6. Self-control: Self-control in academic settings is related to self-discipline, regulation, peer groups influence, delay of gratification and impulse control. Self-control to Baumeister & Vohs, (2017) is the capacity for altering one's own response to term with standards such as ideas, values, moral, social expectations to support the attainment of a long term goals.
7. Extracurricular activities: Extracurricular activities has helped over time to prevent drop-out, depression, low GPA etc. thereby enhances school attendance and engagement. To Mohoney etal. 2015, there is a relationship though not clear between academic achievement and participation in extracurricular activities.
8. Past academic performance/appropriate instructional strategy. Past academic performance is seen to be the only prediction of future performance, a good predictor of success in the future endeavours (Elsa-

Sofia,. Kelvin & Spring, 2016). This exposes the effect of prior knowledge on the students' achievement world. One must use a variety of teaching methods and understanding the background and individual need of the students.

While classroom instruction is the most important factor that impacts students' achievements, as lecturers, one must influence the quality of instruction, set expectation for learning and measure the level of understanding using appropriate instructional strategy (ies), for examples discussion among students, video or stories as well as Field trips to gain their attention, that is making learning fun for better understanding (Darling & Nancy, 2015).

### **Students Perception of Field Trip and Academic Performance**

Choosing a major course to study in the University is one of the most important life decisions an individual will ever make. John (2000) stated that no other college decision is more 'thought-provoking, gut wrenching and rest-of-your-life oriented or disoriented – than the choice of a major'. Invariably this means that effective teaching of major course content in that particular area is more likely to lead to a sense of overall well-being and subsequently enhanced students' academic performance. In a study by Perrone, Zanardelli,

Worthington and Chartrand (2016) and McQuaid and Bond (2013) the use of learner centred instructional model such as Field Trips, demonstration methods, laboratory methods influence on the participation level and academic performance of college students, it was found that learner centred like Field Trips instructional model supportiveness, and quality of relationship contributed to the academic performance of students. Kim, Markham, and Cangelosi (2015) found good job opportunities and projected earnings to be among the most significant factors influencing students' choice of instructional methods used by lecturers in the instructional process and their academic performance.

This implied that students who perceived Field Trips used in Biology to arouse their interest and facilitate their active participation in the instructional process will settle for it irrespective of how others perceived it. Schwartz (2015) noted that while most college students appear to recognize the connection between present day instructional methods used by lecturers and their active participation in the instructional process, many appear ambivalent when it comes to choosing a major course to study. They are 'motivated, but directionless' and have no "serious vision or commitment to a vocation or professional calling thereby resulting in abysmal academic attainment".

Ferry (2016) reported that the perception of the "Field Trips" acts as a filter for job appropriateness and influenced the academic process. Ferry (2016) also stated that you have an idea of what the perfect instructional method is in your head, exactly what you want to get up and go do every day." Previous research by Niles and Weiss (2017) demonstrated that most college students choose their field of study based on their perceptions of the teaching methods adopted by lecturers in general and also of the quality of academic performance they wish to attain. From the above literatures it implied that students who chose Field Trip did so because they perceived opportunities and acquire good learning skills in the instructional method. Oyamo and Amoth (2018) maintained that the choices that students make are embedded in their perception of the Field Trip and the course they study in tertiary institutions.

Results from studies by Malgwi, Howe and Burnaby (2005), Larkin, LaPort and Pines (2007) and Beggs, Bantham and Taylor (2008) indicated that one's interest in the field trips was the most significant factor in their active participation in the instructional process. Interest is an attitude that develops over time intrinsically as a result of either one's perception or the perceptions of others. Tahmincioglu (2017) said that a vast majority of 18–25-year-olds said

that getting involved in the learning process and discovery concepts being taught by lecturers in class was the most important goal in their academic discourse. This implied that students major in Biology because of the perceived Field Trips being utilized by lecturers. Amoor (2009) stated that his interaction with prospective universities' candidates revealed that the nomenclature of the degree (B.Ed) in most of the Nigerian universities that offer Vocational and Technical Education programme accounts for their indifference since most of them do not want to end up in the class-room as lecturers.

In a study by Tanimoune, Posylnaya, Tahsin and Umarou (2017) about the individuals who influenced tertiary students to choose a career in sciences reported that 43.60% respondents said that they were influenced by their college professor's usage of Field trip as an instructional strategy. Invariably, this means that lecturer's usage of Field Trip can affect the career choice of those students who have contact with them. Tanimoune, *et al* further stated that the great portion of students who graduated with degrees in sciences and who failed to successfully enter the technology sector as professionals contributed to the negative perception that students and young professionals had about the non-utilization of learner centred methods like Field Trips in teaching of the

course by lecturers. From the above it means that graduates of Biology and other sciences who successfully gain employment helped to shape other's perception of Field Trip as an instructional method to stimulate their comprehension of concepts in the course and their subsequent academic performance.

### **Summary of Reviewed Literature**

The literature review exhaustively explains the concept of field trip. Field trip is defined as an instructional technology that is an excursion typed of exposing students to the rudiments of the concepts and terminologies taught in class. The importance of field trip to both teachers and students in the instructional process cannot be overemphasized as it helps to facilitate the effective communication between teachers and students and enables students to relate what has been taught in class in a practical situation.

The literature review also highlighted on the perception of students on the concept of field trip as well as its influence on their academic performance. The literature review found that the perception of students about field trip was positive as it helps to accelerate an enhancement in the quality of their academic performance. Previously, it was found that the quality of students' academic

performance in Biology indifferent and moderate which was largely based on the lecture method being utilized by lecturers in the instructional process. In view of this, the use of field trip by lecturers in the instructional process contributed immensely to the elimination of that anomaly as it facilitated the comprehension of concepts taught in class, interaction of lecturers and students as well as the assimilation of the processes involved in carrying out Biology practical.

In furtherance of the above, it was found from the literature reviewed, it is evident that students lack content knowledge and understanding of the concept and the terminologies used in teaching Biology and this shortcoming affects their understanding and full comprehension of concepts in Biology, therefore suggested that Field Trip could be of a very useful tool for lecturers to evaluate their teaching methodologies, students' understanding and reasoning about concepts in Biology. More so, a look through literatures as well as societal beliefs revealed that much attention is on students' misconceptions and less attention on their lecturers' misconceptions. Therefore, there is the need to investigate perception by students on Field Trips and its influence on their academic performance in Biology.

## **CHAPTER THREE**

### **METHODOLOGY**

The method that will be adopted for carrying out this research will be presented in this chapter under the following sub headings

- Research Design
- Population of the Study
- Sample and Sampling Technique
- Research Instrument
- Validity of the instrument
- Reliability of the instrument
- Method of Data Collection
- Method of Data Analysis

#### **Research Design**

The design of this study was descriptive survey research design as data will be collected from representative sample of University of Benin undergraduate Biology students using modified Likert scale questionnaire. Descriptive survey research design was used because the research collected information from a large population using sample to generalize.

## **Population of the Study**

The population for this study consisted of all the undergraduate Biology students (300-400 level) in the Department of Curriculum and Instructional Technology, University of Benin, Benin City in the 2019/2020 academic session with total population of two hundred and forty-nine (249) students.

## **Sample and Sampling Technique**

The sample for the study comprised of 100 students. The simple random sampling technique will be employed by the study in selecting hundred students from the two levels (300-400) under consideration. Thereafter, fifty students each from the two levels (300-400) will be randomly selected by the study to make the sample for the study.

## **Research Instrument**

A structured questionnaire was used for data collection. The instrument has two sections: Section A consists of personal data of students such as, sex, and level and section B consists of questions on the perception of the respondents on Field Trip and academic performance. The questionnaire was structured on ; four point modified Likert scale question type of Strongly agree

(SA) 4 points, Agree (A) 3 points, Disagree (D) 2 points, and Strongly Disagree (SD) 1 point.

### **Validity of the Instrument**

The instrument was validated by the researcher's supervisor and two experts in the Department of Curriculum and Instructional Technology. The opinions, suggestions and recommendations of these experts will be used to produce the final instrument. These screening processes ensured the content and construct validity of the instrument.

### **Reliability of the Instrument**

In testing reliability, the instrument was administered to 20 students who did not form part of the research sample. A cronbach alpha was used and a reliable co-efficient of 0.71 was obtained, thus signifying positive reliability index which makes the instrument adequate for the study.

### **Method of Data Collection**

The research distributed questionnaire to the selected sample and the questionnaire were personally administered to the respondents and collected on the spot on the same day to ensure 100 percentage collection on return.

## **Method of Data Analysis**

The data collected was statistically analyzed using descriptive statistics of frequency, mean ( $\bar{x}$ ), and standard deviation (SD). To determine the student's perception on Field Trip and its influence on their academic performance, the mean score will be interpreted relatively to the real lower and upper limits of the numbers 1-4 as used in the questionnaire adopted for the study. Any item with a mean value of 2.50 and above will be regarded as students whose perception of field trip is positive, while less than 2.50 will be regarded as students whose perception of field trip is negative.

## CHAPTER FOUR

### PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

This chapter deals with the data presentation, data analysis and discussion of the findings of the study. It will be discussed under the following sub-headings

#### Presentation of Bio data Information

Table 1: Distribution of Respondents by Sex

<b>Variable</b>	<b>Frequency</b>	<b>Percentage</b>
Male	36	36
Female	64	64
<b>Total</b>	<b>100</b>	<b>100.0</b>

In Table 1, 36 representing (36%) of the respondents were males while 64 representing 64% of the respondents were females. From the foregoing, it could be deduced that majority of the respondents were females.

**Table 2: Distribution of Respondents by Level**

<b>Variable</b>	<b>Frequency</b>	<b>Percentage</b>
300 level	58	58
400 level	42	42
<b>Total</b>	<b>100</b>	<b>100.0</b>

In Table 2, indicate that 300 level had 58% of respondents while 42% of the respondents were in 400 level. From the foregoing, it could be deduced that majority of the respondents were in 300 level.

**Research Question One:** How do Biology students in the University of Benin perceive Field trip as an instructional method?

**Table 3: Mean and Standard Deviation on the Extent to Which Biology Students Perceive Field trip as an Instructional Method?**

S/N	ITEMS	N	SUM	MEAN	SD	REMARK
1	I like to be taught with the Field trip because it affords me the opportunity to assimilate comprehensively the concepts taught in class	100	359	3.59	.712	Agreed
2	I like to be taught with Field Trip because it solidifies my interest and attention in the instructional process	100	340	3.40	.696	Agreed
3	I dislike the Field Trip method because it fosters unnecessary distractions emanating from the learning environment	100	211	2.11	1.014	Disagreed
4	I have a positive view about the Field Trip methods because it creates an atmosphere for students to discuss extensively among themselves what has been taught in class	100	335	3.35	.757	Agreed

5	The tendency for students to relate what has been taught in class in practical situations has stimulated my positive perception about the Field Trip method	100	329	3.29	.832	Agreed
	<b>TOTAL</b>			<b>3.148</b>		

In the Table 3 shows that high mean scores were obtain from item 1,2,4 and 5 with the mean of 3.5, 3.40, 3.35 and item 3 is 2.11. The total value was 3.148 which shows that the respondents have a positive perception about field trip as an instructional method.

**Research Question Two:** To what extent does the perception of Biology students about Field Trip in the University of Benin influence their academic performance in the course?

**Table 4: Mean and Standard Deviation on Perception of Biology Students about Field Trip Influence their Academic Performance in the Course**

S/N	ITEMS	N	SUM	MEAN	SD	REMARK
6	The efficacy of the Field trip method in simplifying concepts in Biology has been responsible for rejuvenating the quality of academic attainment in the course.	100	299	2.99	.772	Agreed
7	The quality of my academic performance in Biology has been influenced greatly by the effectiveness of Field Trip in arousing my interest in the instructional process	100	288	2.88	.977	Agreed
8	My abysmal rate of failure in Biology has been eliminated by the use of lecturers in exposing students to Field trips on a frequent basis	100	253	2.53	.989	Agreed

9	My indifferent academic performance in Biology has remained a constant feature regardless of the integration of Field Trip in the teaching of the course	100	267	2.67	.933	Agreed
10	The indifferent results recorded by students in Biology has been reduced significantly by the integration of the field trip approach in the teaching of the course	100	278	2.78	.970	Agreed
	<b>TOTAL</b>			<b>2.77</b>		<b>AGREED</b>

The data in Table 4 showed that the mean of the items ranged from 2.67 to 2.99 indicating that the respondents agree. The standard deviation of the items ranged from .772 to .989. This indicated that the respondents were close in their responses. The respondents agreed that field trip influences their academic performance.

**Research Question Three:** To what extent does the perception of Biology students about Field Trip in the University of Benin influence their comprehension of Biology topics?

**Table 5: Mean and Standard Deviation on the Extent to which Perception of Biology Students about Field Trip Influence their Comprehension of Biology Topics**

S/N	ITEMS	N	SUM	MEAN	SD	REMARK
11	My assimilation of Biology concepts has improved significantly as a result of the integration of Field Trip method by lecturers	100	321	3.21	.880	Agreed
12	The difficulties experienced by students in comprehending properly what has been taught in class has not improved irrespective of the integration of the Field Trip approach.	100	278	2.78	.927	Agreed
13	I do not have any difficulties in explaining Biology formulas since the field trip approach was adopted by lecturers in teaching the course.	100	287	2.87	0.895	Agreed

14	My difficulties I experience in assimilating Biology concepts has been worsened by obnoxious perception of field trip as an instructional approach used by lecturers.	100	213	2.13	1.002	Disagreed
15	The positive views held by students about Field trip approach has accelerated their self - efficacy in carrying out practical independently without supervision from lecturers.	100	297	2.97	.810	Agreed
	<b>TOTAL</b>			2.79		AGREED

The data in Table 5: Showed that the mean of the items ranged from 2.13 to 3.21. All the items had their means above different point relating that the respondents agree. The standard deviation of the items ranged from .810 to 1.002. This indicated that the respondents were close in their responses. Therefore, having more accepted items shows that the respondents agreed that field trip influence their comprehension of Biology topics.

**Research Question 4:** What is the influence of field trip on the academic performance of students in University of Benin?

**Table 6: Mean and Standard Deviation on the influence of Field Trip on Students' Academic Performance**

S/N	ITEMS	N	SUM	MEAN	SD	REMARK
16	The level of comprehension through the use of field trip in the instructional process has influenced my high grades recorded in Biology exams	100	281	2.81	.825	Agreed
17	The level of self-efficacy I developed through the use of field trip method has resulted in the improvement recorded in Biology exams recently	100	295	2.95	.833	Agreed
18	My indifferent performance in Biology has been improved by the frequent use of field trip in carrying out Biology practical	100	277	2.77	0.886	Agreed
19	My academic performance in Biology has improved tremendously as a result of the exposure to field trip methods by lecturers	100	280	2.80	.910	Agreed

20	I have always recorded poor academic performance in Biology regardless of the use of the Field trip method by lecturers	100	197	1.97	1.06	Disagreed
				2.66		AGREED

Table 6: shows that the mean responses ranged from 1.97 to 2.95, which the standard deviation ranged from .825 to 1.06. Finally, the respondent agreed that knowledge acquired by students during field trip influence their academic performance.

### **Discussion of Results**

The finding of the study in research question one revealed how Biology students in the University of Benin perceive Field trip as an instructional method. The study revealed that students had positive perception about the concept of field trip as they were evidently not interested in the lecture method that reduced them to passive listeners in the instructional process. This is sequel to the findings of Chukwuma & Osato (2017) that the use of field trip method in teaching Basic Technology in tertiary institutions in South- South universities

in Nigeria as students were enthusiastic in learning the course as it accelerated their comprehension of the techniques in applying technological principles and the processes involved in designing metals.

The finding of the study revealed the extent to which the perception of Biology students about Field Trip in the University of Benin influences their academic performance in the course. The findings of the study revealed a positive perception of students accelerate an enhancement in the quality of their academic performance even though it was not entirely convincing. This is sequel to the assertion of Bamidele (2018) that the positive perception of students on the concept of cooperative method in teaching Mathematics in secondary schools in Oyo State accelerated a tremendous improvement in their academic performance.

The finding of the study in research question three revealed the extent to which the perception of Biology students about Field Trip in the University of Benin influences their comprehension of Biology topics. The findings are in consonance with the assertions of Adegboye (2017) that the assimilation of concepts in Physics by students in public secondary schools in Akure South

Local Government was stimulated by the frequent use of Field Trips as an instructional strategy in the instructional process.

The finding of the study four reveals that students taught using field trip method performed better to those taught with lecture method, and this conformed to recent findings of (Mc Manus, Dunn, & Denig, 2003) that the use of active learning materials resulted in improved science achievement and more positive attitudes about science. Also the use of student-centered classroom strategies, like field trip for life sciences course resulted in positive student responses and effective performance on standardized examination (Lunsford & Herzog, 1997).

This study is in agreement with Chickering & Gamson (1987) that stated that learning is not a spectator in sport where by students have to learn just by sitting in the class listening to lecturers, memorizing pre-package assignment. But an active learning strategy improves student's achievement more (Kovac, 1999). It also concurred with the work of Driver (1994) that stated that in constructivism, learners actively construct their own understanding and knowledge of the world through experiencing things, manipulating them and reflecting on these experiences Keogh and Naylor's recent research focuses on

how field trip have impacted students' enquiry learning skills perception and can stimulate argumentation and promote professional practice (Keogh and Naylor, 2011).

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATION

#### Summary

This study was aimed to find out the perception of undergraduate students on the influence of field trip on their academic achievement. The research design adopted in this study is descriptive survey research design. The population for this study consisted of all the undergraduate Biology students (300-400 level) in the Department of Curriculum and Instructional Technology, University of Benin, Benin City in the 2019/2020 academic session with total population of two hundred and forty-nine (249) students. The sample for the study comprised of 100 students. The simple random sampling technique was employed by the study in selecting hundred students from the two levels (300-400).

In carrying out this study, the researcher employed the use of a structured questionnaire in collecting relevant data necessary for the study. Section A consist of personal data of students such as, sex, age, and level and section B consisted of questions on the perception of the respondents on Field Trip and academic performance. It was a four-point modified Likert scale question type

of Strongly agree (SA) 4 points, Agree (A) 3 points, Disagree (D) 2 points, and Strongly Disagree (SD) 1 point. The research instrument was validated by the researcher's questionnaire and two lecturers in the Department of Curriculum and Instructional Technology. The Cronbach alpha method was used to determine the internal consistency of the instrument which yielded a coefficient of 0.71. Data collected were analyzed using descriptive statistical mean and standard deviation.

The following findings emerged from the study:

1. The findings of this study showed that students' academic performance could be enhanced when student centered learning through field trip is used.
2. The study found out that students learn better when they are allowed to participate actively in class by interacting with the lecturer and colleagues, that is focused discussion about the concepts presented.
3. Students had a positive perception about the use of field trip in the instructional process as they were expressed.

4. The positive perception of students on the concept and use of field trip in the instructional process accelerated an enhancement in their academic performance.

## **Conclusion**

In the course of debating their ideas, students have the opportunity to engage in interactive, dialogic talk in a group setting where they articulate their thoughts, question each other, generate claims, propose explanation and justify, their reasoning. However, the lecture (traditional) method of chalk and talk should not be discarded totally; instead, both can be incorporated by the lecturer for effective teaching and learning.

## **Recommendations**

The findings of the study have several implications for the teaching and learning of Biology at the tertiary levels. Based on the findings and conclusions, the following recommendations are made.

1. In terms of academic performance, this study shows that field trip instructional strategy enhances academic achievement over the traditional method (chalk and talk). The use of field trips strategy should be

- encouraged and enforced in teaching Biology at the senior secondary schools.
2. Lecturers should be encouraged to use field trips strategy in teaching Biology since it is learners centered. This encourages learners' participation and retention of scientific concepts which enhances field trips as a better instructional strategy.
  3. The use of field trips should be introduced to prospective lecturers in courses such as special teaching methods, instructional technologies, and materials development.
  4. Field trip should be prepared with the support of technology, thus remove time and locations limitations.
  5. Field trip method should be used alongside lecture method since traditional method is also proved to be effective in teaching Biology as “no one method has answers to all’ lecturers should be encouraging to combine the salient features of the traditional method with the field trip to make teaching and learning more effective.

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**APPENDIX**  
**UNIVERSITY OF BENIN,**  
**BENIN CITY**  
**FACULTY OF EDUCATION**  
**DEPARTMENT OF CURRICULUM AND INSTRUCTIONAL**  
**TECHNOLOGY**  
**QUESTIONNAIRE**

Dear respondent,

This research questionnaire solicits information from you. It is design to find out the **Undergraduates Students Perception of Field Trip and its Influence Academic Performance**. The information supplied will be treated in confidence and this exercise is purely for research purpose. Please tick the appropriate answer to each question. Thank you

**PART A: PERSONAL DATA**

1. Sex: Male [  ] Female [  ]
2. Level: [  ] 300 level [  ] 400 level [  ]
3. Age : 18-21 years [  ] 22-24 years [  ] 25-27 years [  ] 28- 30 years [  ] 31 years and above [  ]

**PART B:**

S/N	<b>How do Biology students in the University of Benin perceive Field trip as an instructional method?</b>	SA	A	D	SD
1	I like to be taught with the Field trip method because it affords me the opportunity to assimilate comprehensively the concepts taught in class				
2	I like to be taught with Field Trip method because it solidifies my interest and attention in the instructional process				
3	I dislike the Field Trip method because it fosters unnecessary distractions emanating from the learning environment				
4	I have a positive view about the Field Trip methods because it creates an atmosphere for students to discuss extensively among themselves what has been taught in class				
5	The tendency for students to relate what has been taught in class in practical situations has stimulated my positive perception about the Field Trip method				
	<b>To what extent does the perception of Biology students about Field Trip in the University of Benin influence their academic performance in the course?</b>				
1	The efficacy of the Field trip method in simplifying concepts in Biology has been responsible for rejuvenating the quality of academic attainment in the course				
2	The quality of my academic performance in Biology has been influenced greatly by the effectiveness of Field Trip in arousing my interest in the instructional process				
3	My abysmal rate of failure in Biology has been eliminated by the use of lecturers in exposing students to Field trips on a frequent basis				

4	My indifferent academic performance in Biology has remained a constant feature regardless of the integration of Field Trip in the teaching of the course				
5	The indifferent results recorded by students in Biology has been reduced significantly by the integration of the field trip approach in the teaching of the course				
	<b>To what extent does the perception of Biology students about Field Trip in the University of Benin influence their comprehension of Biology topics?</b>				
1	My assimilation of Biology concepts has improved significantly as a result of the integration of Field Trip method by lecturers				
2	The difficulties experienced by students in comprehending properly what has been taught in class has not improved irrespective of the integration of the Field Trip approach				
3	I do not have any difficulties in explaining Biology formulas since the field trip approach was adopted by lecturers in teaching the course				
4	My difficulties I experience in assimilating Biology concepts has been worsened by obnoxious perception of field trip as an instructional approach used by lecturers				
5	The positive views held by students about Field trip approach has accelerated their self -efficacy in carrying out practical independently without supervision from lecturers				
	<b>What is the influence of field trip on the academic performance of students in University of Benin?</b>				
1	The level of comprehension through the use of field trip in the instructional process has influenced my high grades recorded in Biology exams				

2	The level of self- efficacy I developed through the use of field trip method has resulted in the improvement recorded in Biology exams recently				
3	My indifferent performance in Biology has been improved by the frequent use of field trip in carrying out Biology practical.				
4	My academic performance in Biology has improved tremendously as a result of the exposure to field trip methods by lecturers				
5	I have always recorded poor academic performance in Biology regardless of the use of the Field trip method by lecturers				