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INFLUENCE OF FIELD TRIP IN TEACHING AND LEARNING OF BIOLOGY

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Abstract
The study investigated the influence of field trip in teaching and learning of biology in Enugu East LGA of Enugu state, Nigeria. Three research questions guided the study. Survey design was used for the study. The sample size was one hundred (100) senior secondary school II (SS2) students. The instrument used for data collection was questionnaire made up of 15 items. The instrument was validated by three experts. The reliability coefficient of 0.79 was obtained for the instruments using crombach alpha. The findings revealed that teachers use field trip once a year and that some teachers do not use it all in teaching and learning of biology. The findings also revealed among others that field trip is an effective method of teaching since it helps students acquire useful knowledge while having fun and relaxation at the same time. The researcher recommended that extensive field trip should be organized by schools so as to expose the students to events outside the classroom.
Keywords: Field Trip, Teaching, Learning, Biology

Introduction
Background to the study
Biology is a core science subject offered in the senior secondary school in Nigeria. According to National Policy on Education NPE (2014), the objectives of biology education includes the preparation of students to acquire adequate laboratory and field skills in biology. In the pursuance of the stated objectives, the content and context of the curriculum place emphasis on field studies, guided discovery Laboratory techniques among others. Today, the Nigerian teachers have deviated from the stated objectives, rather than teaching biology in the natural settings, the talk and chalk approach to teaching have become a phenomenon in most schools in Nigeria, an approach to teaching where the teacher does the talking while the students are passive in the learning process. Their duties only include listening and answering questions from the teacher. Field trips are rich in educational possibilities as students learn from actual hands-on experience rather than by simply reading or hearing about something. The key to success in science is not just providing students with a science immersion experience, but also enabling them to conceptualize science as a creative process and of thinking other than a defined body of knowledge. According to Yusuf (2011), the most natural learning is realized through personal experience. Students involving in their work will make them learn and enjoy it.

Field trips help students appreciate the relevance and importance of what they learn in the classroom.

According to Akubuilo (2010) field-trip is a method of teaching that involves taking the students on an excursion outside the classroom for the purpose of making relevant observation necessary for understanding of the topic under study. Often times such trips / excursions enable student to obtain scientific, technological and vocational information. Field trip offer students firsthand experience since they see and observe processes in natural life settings. Field trip enables students to discover and explore new information and also apply/organize previous knowledge by giving concrete examples. Field trips are aids the teacher uses to arouse the interest of the learner thereby enabling the learner to gain direct experience (Ilori, 2010). According to Bitgood and Stephen (2009), Field trip is a trip by students to gain firsthand knowledge away from the classroom, as to a museum, factory, geological area, or environment of certain plants and animals. Field trip is a trip arranged by the school and undertaken for educational purpose in which the students go to places where the materials for instruction may be observed and studied directly in their natural setting. In field work, students assume active investigative roles, thinking like a scientist and doing real science. Direct experience with real objects and processes can give form and meaning to primary concepts. Nature plays an active role in effective learning. Environmental learning creates close association between the learner and the environment thereby granting the students (learner) the opportunity to involve the complete senses in the learning process.

Field-based approach to learning will create a platform for social learning amongst students. Field trips provide an opportunity to involve students, parents and the teachers in the instructional program. Students can select the place to be visited, developing questions to ask, writing reports or thank you letters after the trip, or evaluating the experiences. Since parents must give their permission, a letter sent home with the permission form explaining purpose of the trip is a good way to arouse their curiosity and encourage them to ask the student or teacher about the trip. The parent guides their child in order to make sure that they do not come to any harm. This role allows the parents and teachers to establish a much closer relationship. Science education in the field centers primarily on observational and experimental activities. The natural environment is the main source of information for learning activities. Pupils learn how to use the scientific methods for solving problem. They take and analyze samples, create hypothesis and plan experiments. Also field trips offer a lot of meaningful and educative opportunities to students. These opportunities according to Wilson (2011) are as follows:

i. Field trips provide real learning experience to students as it provides them with the opportunities to put what they learn through other method of teaching into practice.

ii. Field trips activities give students the opportunities to see the world. (Its cultures, diversities and realities) for themselves.

iii. Biology field trips give the students opportunities to gather real ecological data

iv. As the students go out and study in groups during field trips, their interpersonal relationship improves as they learn to live and work with others, supporting each other during group learning activities.

v. Field trips enhance student's memory as the students have been found to remember what they learn in the trips for many years.

Considering the importance of biology and the number of students doing it, it is a disturbing situation to note that large number of students failed biology in the Senior Secondary School Examination (SSCE). Statistics from the West African Examination Council for the past six years has revealed persistent poor performance in science subjects especially in biology (WAEC Chief Examiner's reports for 2010, 2011, 2013, 2014 and 2015). Among the causative factors are Biology teachers' widespread uses of ineffective

lectures and inadequate materials or resources needed for effective teaching of biology. (Egbunonu and Ugbaja 2012).This may be due to the fact that emphasis is primarily on students' poor acquisition. Thus biology is presented to the students as a static body of knowledge rather than a dynamic growing field of discovery. There is need to investigate the use of more efficacious strategies in the study of biology. Therefore, the study is on the influence of field trips in teaching and learning of biology.

Research Questions

The following research questions guided the study:

1. To what extent do biology teachers use field trips in teaching and learning of biology
2. What is the importance of field-trips in teaching and learning of biology?
3. What are the problems hindering the use of field-trips in teaching and learning of Biology?

Research Method

This study is a descriptive survey research design. This study was carried out in Enugu East Local Government Area of Enugu State. The population comprised of 1935 SS2 biology students in all the government secondary in Enugu East Local Government Area of Enugu state. The researcher made use of random sampling to select four (4) secondary schools out of ten (10) secondary schools in Enugu East Local Government Area of Enugu State. By simple random sampling techniques of balloting, 25 Senior Secondary School II (SS2) students were selected from each of the four schools to give the sample size of 100.

The instrument for data collection is structured questionnaire. The instrument was validated by two experts in Biology and one expert in the department of measurement and evaluation of Enugu State College of Education (Technical) Enugu State. Reliability coefficient of 0.79 was obtained for the instrument using crombach alpha. Mean was used for data analysis. Any questionnaire item with mean rating of 2.5 and above is regarded as agreed while any value below 2.5 is regarded as disagreed.

Results

Research Question 1

To what extent do biology teachers use field trips in teaching and learning of biology?

TABLE 1: Responses of students on extent biology teachers make use field-trips in teaching and learning of biology

S/N	ITEM STATEMENT	VHE 4	HE 3	LE 2	VLE 1	N	$\sum FX$	$\bar{X}$	REMARKS
1	Biology teachers use field-trips yearly	30	50	10	10	100	300	3.00	A
2	Biology teachers use field-trips every six months	5	10	60	25	100	195	1.95	D
3	Biology teachers use Field-trips every three months	2	5	23	70	100	139	1.39	D
4	Biology teachers use Field-trips every month	5	15	50	30	100	195	1.95	D
5	Biology teachers do not use field trip at all	30	55	10	5	100	310	3.10	A

From the table 1, it can be seen that in item 1 and 6 the respondents agreed that biology teachers use field-trips yearly and that some biology teachers do not use it at all in teaching and learning of biology with a mean of 3.00 and 3.10 respectively. The respondent

disagreed to items 2, 3 and 4 that teachers use field-trip every six months, 3 months and monthly.

Research Question 2

What is the importance of field-trips in teaching and learning of biology?

TABLE 2: Responses of the students on the importance of field-trips in teaching and learning of biology

S/N	ITEM STATEMENT	SA 4	A 3	D 2	SD 1	N	$\sum FX$	$\bar{X}$	REMARKS
6	Field trip is an effective method of teaching since it helps students acquire useful knowledge while having fun and relaxation at the same time	55	20	15	10	100	320	3.2	A
7	Field trip sharpens the students' observational abilities and helps elicit their interest.	35	40	15	10	100	300	3.0	A
8	Field trip is useful in developing all senses of students namely observation, analysis, reporting, evaluating etc	50	30	15	5	100	325	3.2	A
9	Things that cannot be brought to the classroom can be observed and studied through field trip eg Ecological succession	30	40	20	10	100	290	2.9	A
10	Experience gained during a field trip can motivate students to read about what they have observed so as to harmonize actual field experience with information gathered from textbooks	40	30	15	15	100	295	2.95	A

From table 2, the respondents all agreed that field trip is important in teaching and learning of biology with mean ranging from 2.9 to 3.2.

Research Question 3

What are the problems hindering the use of field-trips in teaching and learning of Biology?

TABLE 3: Responses on the problems hindering the use of field-trip

S/N	ITEM STATEMENT	SA 4	A 3	D 2	SD 1	N	$\sum FX$	$\bar{X}$	REMARKS
11	Funding limitation	60	30	5	5	100	345	3.45	A
12	Time constraints	50	10	15	5	100	325	3.25	A
13	Transportation problem	70	20	8	2	100	358	3.58	A
14	Difficulty in obtaining parental permission	30	50	15	5	100	305	3.05	A
15	Lack of encouragement by the school authority	35	50	13	2	100	318	3.18	A

From the above table 3, the respondents agreed that all the items are problems hindering the use of field trip in teaching and learning of biology with mean ranging from 3.05 to 3.58.

Discussions

In research question 1, it was discovered that some biology teachers do not use field trip at all in teaching and learning of biology and teachers that use field trip use it once a year. Field trip sharpens the students' observation abilities and helps elicit their interest. It reduces the boredom of classroom lectures especially on their most hated subject and teacher. This is also in line with the view of Akubuilo (2010) that field trip helps students make relevant observation necessary for understanding of the topic under study hence the teacher should use field trip in teaching and learning of biology.

In research question 2, the respondents agreed that field trip is important in teaching and learning of biology. This is in line with the observation of Okolo (2014) that field trip creates opportunities to make field observations and have firsthand knowledge of what happens in the natural setting. Experience gained during field trip is long lasting and often more meaningful than when discussed under classroom setting.

In research question 3, it was discovered that funding, time constraints, transportation problems, difficulty in obtaining parental permission, lack of encouragement by the school authority are problems hindering the use of field trips in teaching and learning of biology. This is in line with the findings of Udogu (2010) who asserted that many schools prohibit certain field trips due to costs, safety issues, lack of parental consent and transportation needs.

Conclusion

From the findings the following conclusions can be made

i. Teachers do not make use of field trips in teaching and learning of biology. Some teachers make use of field trips once a year.

ii. Field trip is important in teaching and learning of biology.

iii. Problems hindering the use of field trips include limitation of funds, time constraints, transportation problems, difficulty in obtaining parental permission.

Recommendations

The following recommendations were made

i. Extensive field trips should be organized by schools so as to expose the students to events outside the classroom.

ii. Government should provide funds for schools for regular field trips

iii. PTA should assist the school in providing funds for field trips

References

Akubuilo, A. (2010). A Sense of Place. "Science Teacher 78(5), 12

Bitgood, J. and Stephen, B. (2009): "How Nigeria teacher select interactional materials" British Journal of educational technology vol. 19

Egbunonu R.N & Ugbaja C. (2012). *Biology Teachers Perception of the Factors Affecting the Effective Implementation of Biology Curriculum.* The way forward for Education Reform. In Abonyi, O.S (ed) proceedings of the 52nd Annual Conference of Science Teachers Association of Nigeria, PP 235-242.

Federal Republic of Nigeria (2014). National Policy on Education. 4th edition Lagos: NERDC Press

Ilori N (2010). Local Materials in Science, Technology and Mathematics (STM) Teaching: Identification and Utilization, 38th Annual conference proceeding of science Teachers Association of Nigeria (STAN).

Okolo, D. (2014). In praise of off-season field trips. *Journal of Geography, 99(1), 36-42.*

Udogu (2010). "*The Educational Value of Field Trips". Education Next. Retrieved 4*

March 2015.

West African Examination Council 2010, 2011, 2012, 2013, 2014 and 2015 *Chief Examiners Report*, WASSCE.

Wilson, M. (2011). *Field Trip Fundamentals.* Educational Digest, 76(6), 63-64.

Yusuf, A. (2011). Effect of field trip method of teaching on students' performance in Social Studies. *Ilorin Journal of Education, 2*, 7-17.