



Assessing the impact of Fieldtrip on Students of Environmental related Courses in Kwara State University Malete, Nigeria

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ABSTRACT

Field trips are essential components of environmental education, offering hands-on experiences that complement classroom learning. This study investigates the impact of field trips on students of environmental related course in Kwara state university Malete, Nigeria and their awareness, knowledge, and attitudes in environmental-related courses. A quantitative approach was employed, and 100 students in environmental related course were surveyed. Pre- and post-field trip assessments measured changes in environmental knowledge, attitudes, and behavior. Findings indicates that among 76 valid participants (average age 21.97), most were female (65.8%), Muslim (55.3%), in the 500 level (40.8%), and studying Environmental Management and Toxicology (32.9%). Field trips were widely appreciated for enhancing knowledge (73.7%), boosting interest (61.9%), and aligning with curricula (65.8%). Students noted exposure to new tools (57.9%) and improved problem-solving regarding environmental challenges (54%). They also reported gains in academic performance, independence (92.1%), enthusiasm (98.7%), career goals (94.7%), and public speaking (96.1%), showcasing field trips' pivotal role in environmental education. It was recommended that incorporating regular field trips into environmental curricula, encourage active participation and reflection during field trips and develop assessment tools to evaluate field trip effectiveness.

ARTICLE INFO

Article History

Received: May, 2024

Received in revised form: July, 2024

Accepted: September, 2024

Published online: December, 2024

KEYWORDS

Field trips, Environmental Education, Experiential Learning, Environmental Awareness, University Students

INTRODUCTION

Field trip is a kind of educational excursion in which students and teachers go to an off-campus location to do research or participate in other types of hands-on learning related to a certain topic (Prem, 2012). It might mean going on trips to different locations to learn about them firsthand by seeing them in their natural habitats (Obeka 2010). Field trips are one of the extra-curricular activities which are possibly separate from the formal curriculum. However, field trips are a complementary part of revising the students' previous understandings and facilitating their practical skills, which are unlikely to have enough time to be sharpened in the disciplinary curriculum (Tran, 2017). In addition, field trips can bring

practical value for the students through obtaining novel experience, adding interest to learning, promoting cognitive skills, providing high motivation to school subjects, and facilitating social integration (Larsen et al., 2017). Ofoegbu 2009 defined field trip as an outdoor practical and he further regarded it as a learning ground in the community for both the teachers and students to learn". It was further buttressed that, in order to learn from natural environments especially in environmental-based courses like Biology, Environmental Education, Geography and Ecology, students' can be taken to ponds, streams, grasslands, forests, mountains among other naturally occurring places. Other outdoor

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laboratories are museums, factories, technical workshops, mines, quarries, mills etc.

The fun of going on field trip is not the main point of field visits, but rather serves to an end in facilitating more effective instruction. When a lecturer successfully gets the information through in a way that will achieve the intended goals, and when students demonstrate mastery of the material via assessment, they have engaged in effective teaching (Ameer et al., 2021). The goal of taking secondary school students out into the natural world on a field trip is to improve their understanding of the subject through direct engagement with experts and the environment. Learning outside the classroom aims to provide opportunities for all learners to participate in high-quality outdoor learning activities, and these centers were designed to provide better resources for first-hand knowledge than the school (Ahmad, 2014).

Field excursions could be one of the tools that have aroused students' interest in learning, this has challenged them to be inquisitive, seek out information, and air their thoughts with their classmates. The technicalities of field trip have also created many avenues for student learn more about their environment s and the world at large rather the academic impact (Behrendt & Franklin, 2014). According to Behrendt & Franklin (2014) some of the impacts of field trips on students are namely; development of their presenting and observational abilities, the promotion of student interest and motivation in the topics being studied; the development of interrelationships; and the improvement of social interactions. Omeodu and Abara (2018) and Egwu and Okigbo (2021) all at different times found that students experience during field trip significantly contribute to the improvement in their academic performance in science subjects. Given this context, the goal of this study is to investigate the impact field trip on academic performance of environmental related students in Kwara State University, Malete, Kwara State, Nigeria.

Field trips are expository in nature; they explain, elucidate and expatiate more on the teaching-learning process. These natural settings are used as extension to environmental field work

and enhance new discoveries by students which the course curriculum is in support of. However, owing to the high cost of education, there are periods when fewer resources are devoted to improving classroom performance. It's possible that many of the lecturers have no idea where they should take their students on field trips. It could be because of the poor attitude towards field trip by teachers, students, government and other stakeholders of education. It has also been observed that most higher institutions no longer accord priority attention to excursion and field trip method in the teaching learning process, and this could account for the performance of the students in field-based subjects like Environmental health Science, Environmental Management and Toxicology, Plant and Environmental biology, geology amongst others (Hauwa *et al.*, 2024).

Motivated by the forgoing, these researchers decided to undertake this study to evaluate students' academic performance before and after a comprehensive fieldtrip method of teaching. Hence, the study investigated the impact of field trip on academic performance of students in environmental related courses in Kwara State University, Malete, Nigeria. The study assessed the impact of field trip on academic performance of students of environmental related courses and to understand the perception of field trip on student in environmental related courses in Kwara State University, Malete, Nigeria. The following objectives were pursued

1. Assess the experience of students on field trip
2. Evaluate the effect of field trip on student's academic performance

METHODOLOGY

The descriptive cross-sectional study was adopted for this study. The study area was Kwara State University, Malete. The 2023/2024 session final year students of the Departments of Environmental Health Science, Environmental Management and Toxicology, Geology, Plant and Environmental Biology were purposively sampled for the study. 100 final year students who had embarked on field trip in their harmattan semester were randomly selected within these disciplines.



The data was gathered with the use of structured questionnaires. Students were sent a e-questionnaire in their various departments to get honest and rapid answers from them on their demographics, their experiences during field trip and in the lecture rooms. The questionnaire consisted of four sections, the first section sort for the demographic information of the respondents, the second section gathered information on perception of students on field trip, the section sort for the experience of students on field trip and the last section gathered information on the effect of field trip on students' academic performance. The results received were presented in tables, frequencies and percentage.

RESULTS

Table 1: Biodata of Respondents

Variable	Options	Frequency	Percentages (%)	Mean	Standard Deviation
Age	16-20	21	27.6	21.97	2.91
	21-25	47	61.8		
	26-30	8	10.5		
Total		76	100		
Gender	Female	50	65.8	0.66	0.47
	Male	26	34.2		
Total		76	100		
Religion	Islam	42	55.3	0.55	0.5
	Christianity	34	44.7		
Total		76	100		

The distribution of participants by academic discipline, as detailed in Table 2, shows a relatively balanced representation across fields. The highest proportion of participants came from Environmental Management and Toxicology (32.9%, $n = 25$), followed by Environmental Health Sciences (30.3%, $n = 23$). Geology and Plant and Environmental Biology were equally represented, each accounting for 18.4% ($n = 14$) of the sample. The mean coding value for the categories was

The descriptive statistics for age, gender, and religion, as shown in Table 1, provide insights into the composition of the sample. The mean age of participants was 21.97 years ($SD = 2.91$), indicating that the group primarily comprised young adults. Gender was coded as Female = 1 and Male = 0, yielding a mean of 0.66 ($SD = 0.47$), which shows a higher proportion of females (65.8%) compared to males (34.2%). Religion was coded as Islam = 1 and Christianity = 0, with a mean of 0.55 ($SD = 0.50$), suggesting a slightly larger proportion of Muslim participants (55.3%) compared to Christians (44.7%). These findings reflect a relatively young and demographically distinct sample, with notable variations in gender and religious representation.

2.75 ($SD = 0.95$), indicating a slight skew towards the more frequently represented disciplines. Overall, these results suggest a balanced distribution across the four fields, with a significant concentration in Environmental Management and Toxicology and Environmental Health Sciences, which together constituted over 60% of the sample.



Table 2: Department of the Respondents

Options	Frequency	Percentage (%)	Mean	Standard Deviation
Geology	14	18.4	2.75	0.95
Plant and Environmental Biology	14	18.4		
Environmental Management and Toxicology	25	32.9		
Environmental Health Sciences	23	30.3		
Total	76	100		

The academic levels of respondents, as summarized in Table 3, show a diverse range of representation. Most participants were at the 500 level, making up 40.8% of the sample ($n = 31$), followed by those at the 300 level (32.9%, $n = 25$) and the 400 level (26.3%, $n = 20$). The mean academic level was 3.08 (SD = 0.83), indicating a

slight skew towards senior-level students. These results suggest a varied sample, with a notable concentration of upper-level students, likely reflecting their higher engagement or experience with the topics under study.

Table 3: Academic Level of Respondents

Level	Frequency	Percentage (%)	Mean	Standard Deviation
300	25	32.9	3.08	0.83
400	20	26.3		
500	31	40.8		
Total	76	100		

The descriptive statistics of perception of the responses regarding field trips, as summarized in Table 4, indicate mostly positive perceptions. A significant majority (65.8%) strongly agreed that field trips are a part of their course curriculum, with a mean response of 1.35 (SD = 0.50), showing strong agreement. However, opinions on the frequency of field trips were more divided; 15.8% strongly agreed and 34.2% agreed, while 25% disagreed or strongly

disagreed, leading to a higher mean of 2.60 (SD = 1.05) and greater variability in responses. Most participants (69.8%) strongly agreed that the locations visited were relevant to their studies (mean = 1.32, SD = 0.47) and that the knowledge gained was significant (73.7%, mean = 1.26, SD = 0.44). These findings highlight the perceived relevance and educational value of field trips, despite differing views on their frequency.

Table 4: Perception of Students on Fieldtrips

Variable	SA (%)	A (%)	SD (%)	D (%)	Mean	Standard Deviation
Field trip is in our course curriculum	65.8	32.9	1.3	0	1.35	0.5
We go for field trip twice in a session	15.8	34.2	25	25	2.6	1.05
The places visited align with my course of study	69.8	28.9	1.3	0	1.32	0.47
Knowledge grasped from the field trip was impactful	73.7	26.3	0	0	1.26	0.44

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The responses about the experience from field trips on participants' learning and experiences, summarized in Table 5, reveal positive outcomes. Most participants strongly agreed that the practical experience enhanced their confidence and boldness (60.5%, mean = 1.41, SD = 0.51) and deepened their understanding of classroom material (69.8%, mean = 1.30, SD = 0.46), indicating strong agreement levels. Similarly, 61.9% strongly agreed and 36.8% agreed that the trip increased their interest in their course (mean = 1.39, SD = 0.54). Additionally, 57.9% strongly agreed and

36.9% agreed that they were introduced to innovative tools and technologies for environmental assessment (mean = 1.50, SD = 0.68). Finally, 54% strongly agreed and 40.8% agreed that they identified environmental issues and learned ways to address them (mean = 1.54, SD = 0.70). These results highlight the field trips' effectiveness in boosting participants' confidence, interest, and knowledge, while introducing them to practical solutions and new tools for environmental challenges.

Table 5: Experience from fieldtrip

Options	SA (%)	A (%)	SD (%)	D (%)	Mean	Standard Deviation
The practical experience has made me confident and bold	60.5	38.2	1.3	0	1.41	0.51
It has enhanced my knowledge on what I have learnt in class	69.8	30.2	0	0	1.3	0.46
I have more interest in the course now with field trip	61.9	36.8	0	1.3	1.39	0.54
I have been exposed to new tools and technology	57.9	36.9	2.6	2.6	1.5	0.68
I identified environmental issues and learned to solve them	54	40.8	2.6	2.6	1.54	0.7

The effects of fieldtrip on students' academic performance were examined and table 6 showed that most participants agreed or strongly agreed that they felt confident performing practical exercises independently (92.1%, mean = 1.91, SD = 0.61), reflecting a generally high level of self-assurance. Additionally, the field trip significantly enhanced their enthusiasm for learning (98.7%, mean = 1.47, SD = 0.53) and inspired them to view their course as a viable career path due to

promising job prospects (94.7%, mean = 1.58, SD = 0.66). A notable majority also reported gaining the ability to speak publicly, drawing on the knowledge acquired during the trip (96.1%, mean = 1.50, SD = 0.63). These results underscore the positive role of field trips in strengthening practical skills, fostering career motivation, and building public speaking and independent work confidence.

Table 6: Effects of Fieldtrips on Students Academic Performance

Options	SA (%)	A (%)	SD (%)	D (%)	Mean	Standard Deviation
I can carry out practical exercise confidently without supervision	23.7	68.4	1.3	6.6	1.91	0.61
It has heightened my zeal to learn more	54	44.7	0	1.3	1.47	0.53
It has awakened my passion to take my course as a profession due to job opportunities	51.3	43.4	1.3	4	1.58	0.66
I can speak publicly based on the knowledge I have gained	55.3	40.8	2.6	1.3	1.5	0.63

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DISCUSSION OF FINDINGS

The findings of the study indicated that the field trips were impactful to the study, and it aligns with their course of study, but the frequency of field trip is very low. This may be because students were often occupied with learning the formal curriculum and lecturers hardly have enough time to factor in the field trip into their filled academic schedule.

Another finding from the study revealed that field trip has encouraged the student to develop more interest in the course as they have visualized and practicalized the course in real time which may have ignited more interest in them and exposure to modern and advanced tools in assessing the environment as a result of the trip and has also renewed their passion for the course. Most time, explaining how a concept works in class may not be adequate in providing students with the required knowledge acquisition but when the students are able to see how these things work in real life, they tend not to forget easily and understand better. This agrees with the findings of Omeodu and Abara (2018) and Egwu and Okigbo (2021) who all at different times found that students experience during field trip significantly contribute to the improvement in their academic performance in science subjects.

In this study, the field trip was organized for the students because it helped them stimulate positive motivation. This agrees with Lau, Lee, and Ho's (2019) findings which showed Malaysian students' commitment from positive motivation. This motivation can enable student to acquire more knowledge for their course of study, as well as other courses in school, this knowledge can also be applied into their working environment because of their field trip experience. In addition, positive motivation as the result of field trips encourages students to become active participants and progress in learning in their university and be ready to work in the industry.

Another finding from this study indicated field trip has impacted their academic performance and built their confidence in contributing to matters concerning environmental issues. This agrees with the findings of Omeodu and Abara (2018) and Egwu and Okigbo (2021)

who realised that students experience during field trip significantly contribute to the improvement in their academic performance in science subjects. However, the study disagrees with Eze and Asogwa (2016) who reported that student taught with field trip had slightly lower scores in the achievement test than those with video instruction. The field trips have not been widely implemented at the various departments to our best knowledge of the researchers. This could be due to the workload in the course curriculum which has little or no space to fit in the field trip and makes it also impossible for lecturers to create time for them. The various field-based departments should organize more field trips for the students to foster the students' direct awareness of necessary employability skills for their graduate employment.

CONCLUSION

The study concluded field trip experienced has aroused their interest in the course as it has opened their eyes to the reality of the course and how interesting it can be. The study also exposed the students to new and advanced tools in assessing the environment which they only heard off during their class study. The study also concluded that students' academic performance increased after they went on a field trip since they had the chance to gain knowledge that would stick with them for a while.

It is recommended based on the findings of the study that:

1. School authority should make up spaces in the curriculum to fit more field trips for students to acquire more real time knowledge.
2. Lecturers should ensure that the students go on a field trip at least twice in a semester.
3. The school authority should encourage and support both parents and lecturers to allow students in embarking on field trip.

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