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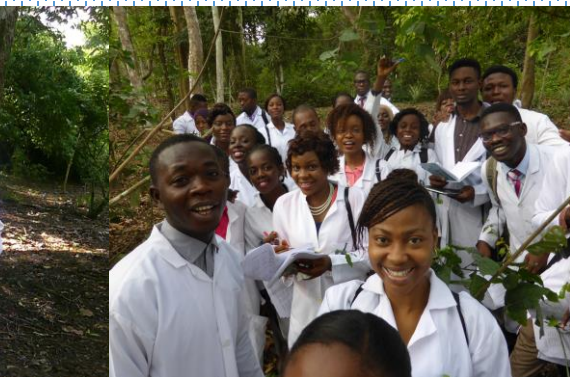
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PHARMACOGNOSY FIELD TRIPS AND HERBARIUM TECHNIQUES

OGUNLOWO Ifeoluwa I.

**Department of Pharmacognosy,
Faculty of Pharmacy, Obafemi Awolowo University,
Ile-Ife, Nigeria.**



Introduction

History of Field Trips

The German poet Johann Wolfgang von Goethe (1749-1832), authored what might be considered an appropriate philosophy for outdoor and experiential education field trips when he wrote:

"Knowing is not enough; we must apply. Willing is not enough; we must do"

(Parr, 2005/2006).

Introduction

It is difficult to teach skating or dancing by correspondence. Therefore, the study of nature needs to be taken to its source if the best results are to be obtained

(Jaques, 1946).

Introduction

Definitions of Field Trips

- A field trip is defined as any teaching and learning excursion outside the classroom.
- Field trips are applied learning experiences for students generally off-campus, away from the school, and outside the formal classroom (Zirkel, 2007).

Introduction

Differences between field trips, tours and excursions

- Tours and excursions are sometimes considered as field trips. However, these names have come to connote a seriousness-lacking activity compared to bonafide field trips.
- Tours and excursions are now defined and considered as trips that are merely for recreational or entertainment purposes (Zirkel, 2007).

Introduction

Purpose of Field Trips

- While a large percentage of our students hope to use their knowledge in a professional way, it is recognized that there are many whose chief interests lie in other fields.
- A field trip to industries, gardens or both could help in spelling out the relevance of courses taught with what is obtainable in the real world.

Importance of field trips

- Field trips get students out of traditional, formal school settings into unique, non-school, and informal learning settings (Kisiel, 2006).
- They are the most common out-of-classroom learning experiences encountered by students (Cornish, 1986; Kisiel, 2006).

Advantages and Disadvantages of field trips

Advantages	Disadvantages
Action-oriented	Difficult with large number of students
Reality-related	Organisational effort
Physical activities	Risk of injury
Self-responsible learning	Assessment is difficult
New method for most students	Students are not used to it
Several cognitive learning levels	Hard for students to concentrate
Often interdisciplinary	Hard to place in curriculum

Types of field trips

There are two types –

- Physical

- Virtual

EXAMPLES OF PHYSICAL FIELD TRIPS

PCG 401: A trip to Pax Herbal Clinic and Laboratory



PCG 402 field trip to the Medicinal plant garden



PCG 607 field trip to various habitats on Campus



PCG 607 field trip to the Medicinal plant Garden



Ethnobotanical survey at Vandeikya L.G. Benue state



Ethnobotanical survey at Ibadan



Plant collection field trip

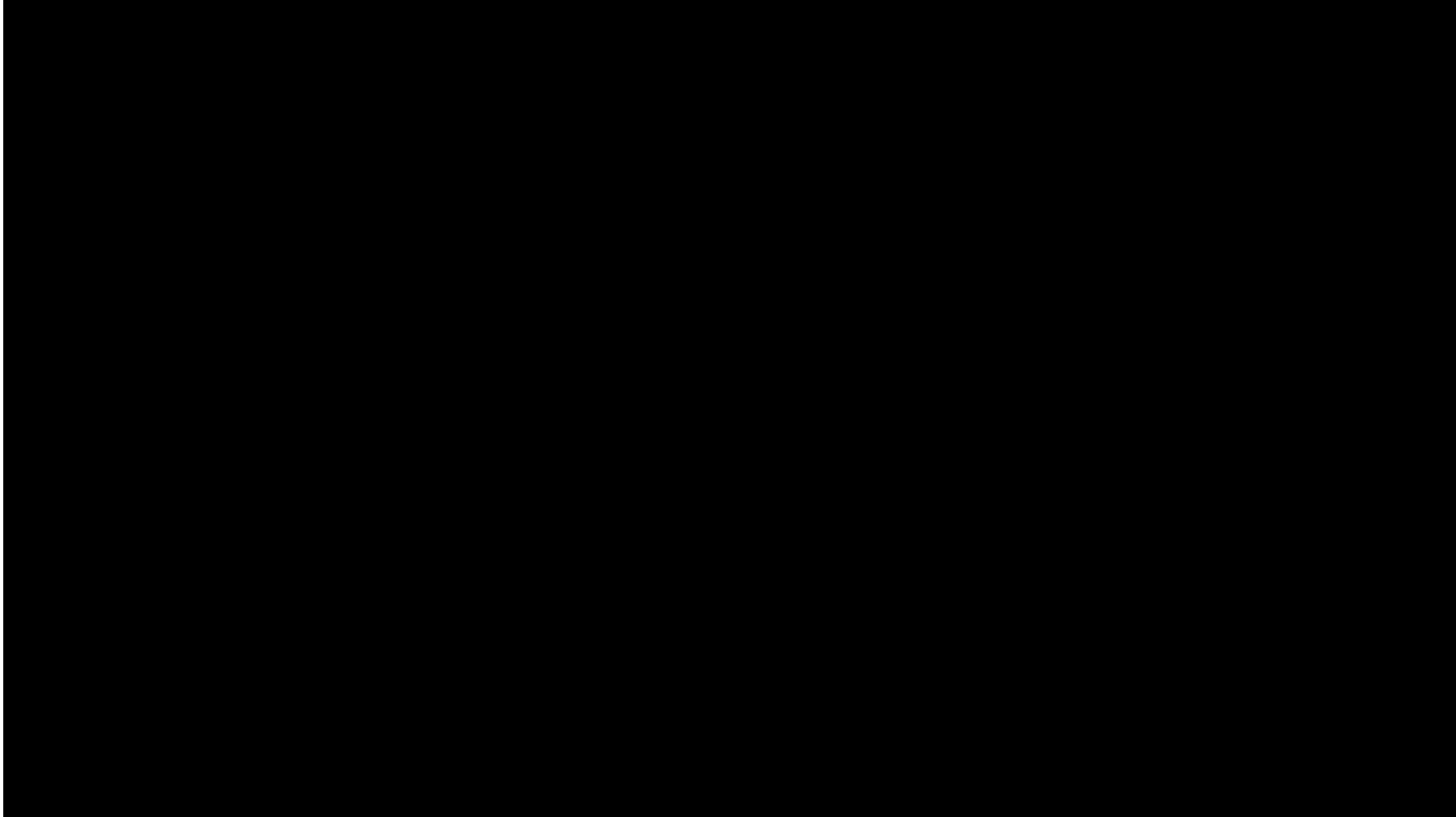


Field trip for the collection of Herbarium specimens



EXAMPLES OF VIRTUAL FIELD TRIPS

A tour to Kew Gardens, London



A tour to the Amazon



- In Pharmacognosy, the following courses PCG 401, 402 and 607 have field trips as their component.
- How do we organize our field trips to enhance students overall performances?

- How can individual researchers plan ethnobotanical surveys or plant collection field trip(s) for their research?

Actions in place

- Submission of field trip report
- Herbarium specimens preparation
- Viva on plant identification and their uses

DETAILED PREPARATION

What is the purpose of the field trip?

- ❖ Materials for Laboratory use (leaves, barks, roots, fruits etc.)
- ❖ Herbarium specimens which includes Field and environmental data
- ❖ Photographs

Other preparations:

- ❑ Gather data on target species & area

- ❑ Organize and group targets

- ❑ Legal obligations and Permits
 - Local communities may need to be consulted
 - Permits needed for Federal Government – owned land / National Parks / State / Municipal Parks, etc.
 - First aid/safety

- ❑ Prepare itinerary and options

YOUR ITINERARY SHOULD INCLUDE

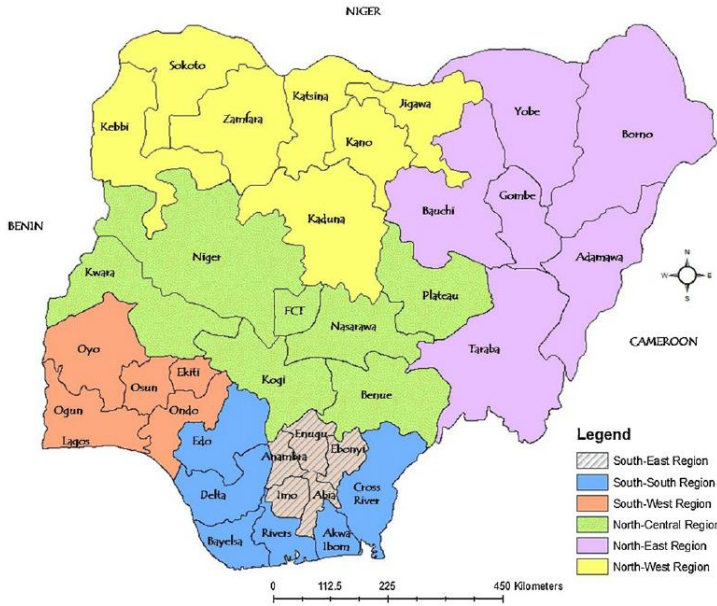
- Accommodation, meal and transport
- Estimate travel, survey, collection and rest time
- Allow time to talk to landowners
- Decide on the option: Frequent or single field trip



SECURE EQUIPMENT



SECURE EQUIPMENT



SECURE EQUIPMENT

LOGISTICS ???

Once you have secured equipment...off you go



**New
developments**

Farm shed



Screen house for drying plants



**New
Pharmacy
foyer garden**



Plant collection field trips

- WHO guidelines on good agricultural and collection practices (GACP) for medicinal plants, 2003.
- Standard for good field collection practices of Medicinal plants, by National Medicinal plants board, Department of AYUSH, Ministry of Health and Family Welfare, Government of India.
- Guidelines for the sustainable harvesting of traditional medicinal plants in Zimbabwe

Herbarium specimen preparation

- A Herbarium is a collection of dried, pressed and preserved specimens
- Collect plant twig with either flowers or fruits or both
 - “by their fruits, you shall know them”*
- Plant barks/fruits/seeds

Procedures for making a herbarium specimen

- Pressing of the plant material
- Drying of the pressed plant material
- Mounting of the dried specimen
- Poisoning or preservation of Mounted specimens
- Filling of prepared herbarium specimens into cabinets

Report writing-It should have the following sections:

- Introduction
- Materials and Methods
- Observations: plant description, real time photographs, plant family & scientific name, local name(s), uses, pharmacology, chemical constituents, possible pharmaceutical application
- Discussion
- References

Herbarium label



MEDICINAL PLANT HERBARIUM

DEPARTMENT OF PHARMACOGNOSY

FACULTY OF PHARMACY

O.A.U., ILE-IFE, NIGERIA

FAMILY:

STATE:

LOCALITY:

NAME:

LOCAL NAME:

HABITAT:

DESCRIPTION:

LOCAL USES:

PHARMACOLOGY:

CHEMICAL CONSTITUENTS:

POSSIBLE PHARMACEUTICAL APPLICATION:

COLLECTOR:

NO.:

DATE:

DET.:

DATE:



**THANK YOU
FOR
LISTENING**