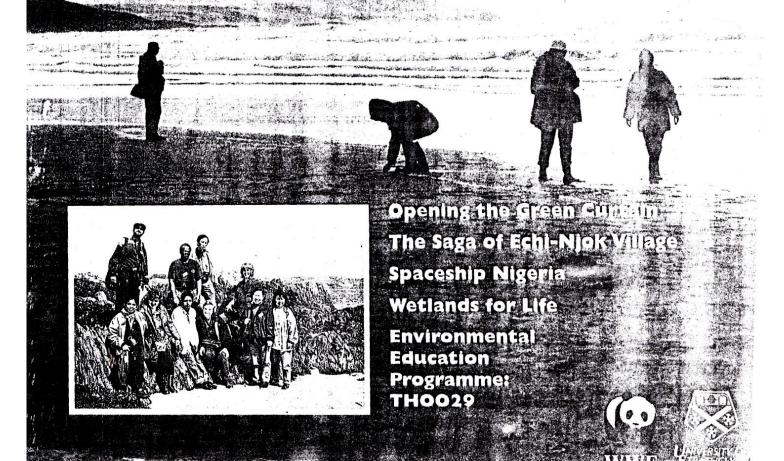


Some Moments of Nostalgia 10 yrs of the EE Course at Jordanhill

From Certificate Course to a PhD

Environmental Education in Botswana:

Past Present & Future



Design and Methodology

A random sample of 123 respondents comprising the students and the programme instructors was taken towards the end of first semester of 1996/97 academic year (Table 1). This survey study was done "in situ" because of the concentration of the required sample.

Responses to the validated 49-item 5-point likert type

questionnaire were scored. Simple frequency counting was transformed into sample percentages and used for analysis. Findings indicate that objectives 2, 4, and 3 were best achieved while programme content and personnel were perceived to be most capable but may be

Table 1: Sample Distribution by Status and Gender

STATUS	M	F	TOTAL %		
Ordinary Diploma 1	20	22	42	34.1	
Ordinary Diploma II	25	28	53	43.1	
Postgraduate Diploma	15	3	18	14.6	
Course Instructors	3	7	10	8.1	
TOTAL	63	60	123		
%	51.2	48.8	100	100	

incapacitated by inadequate instructional resources which, by extension, affect the methodology adopted for the programme.

Data Analysis and Discussion of Findings

The focus of the study was to establish:

(a) The level of achievement of the programme objectives

as perceived by the respondents; and

(b) The capability of the programme inputs (content, personnei, materials, methodology, space, funding and general programme management) to achieve the objectives.

The general findings are as presented on each table and briefly discussed below.

Question I

To what extent have the programme objectives been achieved?

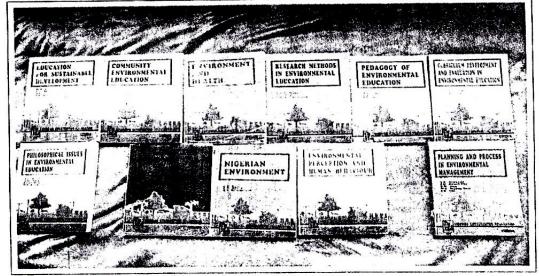
Responses to items 1-5 of Section B of the instrument provided data for answering this question as summarised on Table 2 and discussed thereafter.

Findings indicate that the level of achievement of the objectives as perceived by the respondents varies with the particular objective concerned. Objectives 2,4, and 3

are the best achieved. Forty-six (37.4%), forty (32.5%) and thirty-six (29.3%) respondents see them respectively as being excellently achieved.

Reasons for the variation in the level of achievement of the objectives may include the emphasis given to each of them in the actual programme implementation and the

> interacting effects of other into inputs programme. For example, objective 5 is perceived as least achieved probably because the programme does not adequately emphasise the development curriculum materials for environmentai communication owing to inadequate inputs for that purpose. Even the eleven books designed and written for the (see programme photograph left) co-



Course books for Environmental Education Programmes

Moses Inyang-Abia Alumnus of EE Course I



Input Evaluation of the Environmental Education Programme of the University of Calabar

INTRODUCTION

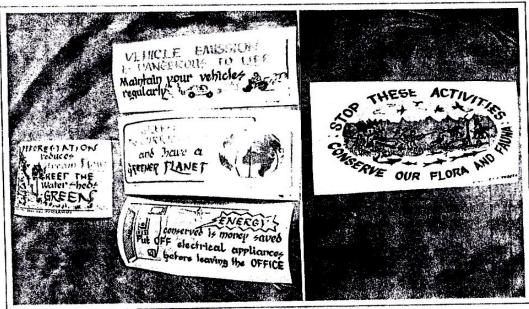
He Environmental Education (EE) programme by the University of Calabar was officially launched on Tuesday, 5 March 1991 before an International audience among whom were the British, Italian, Spanish, Swiss, American, Malaysian, and Nigerian nationals. Currently, the Ordinary Diploma and the Postgraduate Diploma levels of the programme are fully operational. The Bachelors degree in Environmental Education may start in January, 1998. Five objectives of the programme relevant to this stildy as spelt out by the information booklet (Inyang-Abile O) et al., 1994:7) are summarised under Table 2.

Generally, the ultimate purpose of evaluation is objective decision-making. This formative study, based on Stufflebeam's (1974) Context-input-Process-Product (CIPP) evaluation model, was designed to assess the capabilities of the input elements toncerned with attaining the five objectives of the programme. To this end, the study sharpened its focus on the contents, personnel, materials, methodology, space, funding and general programme management. The main question therefore was: What is the capability (adequacy, relevance, functionality) of the identified variables to maximally and efficiently achieve the pre-specified objectives of the programme?

ter to the unit under cas of the NCF and Fit raindly available for into buy for use. a 300 of them depend : few copies available a poorly resourced mini-The few posters and er i isee photograph designed and the unit are yet a reproduced for wide terause of the shortage sponsorship. ties for the design recopment of a wide the of materials for the tement anmental concepts

i except for input

≓∷ere:



Stickers designed and developed by the Programme

entions. The problem of inadequate material inputs as textbooks, posters and field materials is likely to

Intensify when the third programme, the Bachelors degree in Environmental Education, takes off.

3	JECTIVES		LEVEL OF ACHIEVEMENT						
			E	G	F	P	VP	TOTAL	
	Produce manpower that can assist in policy formulation and implementation on environmental conservation/ sustainable development matters.	N %	24 19.5	54 43.9	17 13.8	13 10.6	15 12.2	123 100	
	Develop professionals that will take curriculum initiatives and assist in teaching and learning of environmental education in Nigerian educational system.	N %	46 37.4	27 22.1	22 17.9	16 13.0	12 9.7	123 100	
	Provide expertise that will educate urban and rural dwellers on the subject of environmental conservation, management and sustainable development.	N %	36 29.3	49 39.8	20 16.3	10 8.1	8 6.5	123	
ė	Fill the manpower requirement in environmental protection agencies, natural conservation organisations and national parks.	N %	40 32.5	29 23.6	32 26.0	18 14.6	4 3.3	123 100	
	Ensure the availability of resource persons that will develop materials for the advancement of environmental conservation and protection.	N %	10 8.1	32 26.0	34 27.6	22 17.9	25 20.3	123 100	

E=Excellent; G=Good; F=Fair; P=Poor; VP=Very Poor.

Question 2

To what extent are the programme inputs capable of achieving the objectives?

Responses to items 1-40 in Section C of the research questionnaire provided data for answering the question. The simple percentages were computed. Table 3 summarises the findings.

Table 3: Perception of Input Capability to Achieve the Specified Objectives

INPUT CATEGORY PERCEIVED CAPABILITY Very Capable Fairly Incapable Very TOTAL Capable Capable Incapable Programme Contents N 56 42 6 9 10 123 % 45.5 34.1 4.9 7.3 8.1 100 Personnel Inputs 47 39 N 17 13 7 123 % 38.2 31.7 13.8 10.6 5.7 100 Instructional Materials N 14 17 12 24 56 123 % 11.4 13.8 9.8 19.5 45.5 100 Methodology 11 31 N 8 50 23 123 % 59 25.2 6.5 40.6 18.7 100 Space N 18 27 45 15 18 123 % 14.6 22 36.6 12.2 14.6 100 **Funding** 18 22 31 N 32 20 123 % 14.6 17.9 25.2 26. 16.3 100 **Management** N 16 29 42 20 16 123 % 13 23.6 34.1 16.3 13 1000

Findings indicate that, generally, the programme content and personnel quality, quantity and variety are highly capable of achieving the pre-specified objectives. For example, for the programme content, 79.6% of the respondents have a positive perception. As many as 69.2% of them also agree that the personnel inputs are capable.

But the programme can be incapacitated by inadequate instructional materials (textbooks, library facilities, field equipment, video films, charts, etc) according to the perception of 65% of the respondents. Only 25.2% of them positively perceived the capability of the inputs in this category. This finding collaborates with responses under item five in Table I and reinforces the urgency for local production of relevant instructional materials for the programme.

The close relationship between available programme materials and methodology was clearly indicated too. As many as 59.3% indicated that the methods adopted are incapable of functional achievement of the programme objectives. This is partly because of inadequate equipment

and materials required for the programme. Detailed analysis also emphasised the urgency for utilising more field experience, films and relevant instructional games to expand the learning experiences made available. Perception scores for space, funding and management were generally evenly distributed.

Conclusion and Recommendations

The Environmental Education programme in the University of Calabar is gradually expanding in scope, size and content, especially with the prospect of the Bachelors degree programme in Environmental Education. But problems of relevant instructional materials and methodology are also increasing with the expanding programme and the rising student population. Local production and improvisation have been tried but are inadequate to meet the existing challenges. International co-operation and assistance can facilitate field experience and greater exposure for improved performance.