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#### **Abstracts**

# Nigerian students' perceptions of academic departments as a teaching and learning environment E. A. Okwilagwe

The study examined the quality of the academic environment in tertiary institutions in Nigeria from the perspective of undergraduate students. The sample consisted of 348 final-year students of mathematics, chemistry, English, economics and education at the Universities of Ibadan, Ilorin and Ogun State. Distinct academic cultures were apparent in different departments. Lecturers in the natural sciences were formal with their students and had a strong influence on their intellectual development. In the social sciences and arts they were more 'businesslike' but less committed and poor at meeting students' academic needs. Education lecturers were less formal but gave less academic guidance. The differences reflected the amount of personal attention and academic guidance students got and their relations with the lecturers. All resented being expected to be wholly committed when their teachers were not. Relations between teachers and taught could be a lot better. Most students have some choice of what to learn and how. Students like to have a voice in decisions that affect them and would be more committed to their work if help were more readily available and their efforts were more appreciated.

Key words Student-teacher relations, Learning environment, Nigeria, Tertiary education.

# The effect of literature-based reading on gifted students in Botswana Margaret Biakolo and Omaze Anthony Afemikhe

Giftedness is prized yet not many societies put mechanisms in place to enhance it as well as reap the benefits. This seems to reflect the situation in Botswana, where no actual policy prescription has been put in place. The nearest mention of education for the gifted can only be deduced from the statement that the government is committed to the education of all. Literature-based creative reading is one strategy which has been applied in directing the education of the gifted. This study attempted to find out the effect on the creativity, reading skills and attitude to reading of some gifted students in Botswana. The results indicated no gender effect on the criteria variables. The treatment effects on the criteria variables were all significant. There was also a gender—treatment interaction effect on creativity and reading skills. It was concluded that literature-based creative reading is effective in enhancing the creativity, attitude and reading skills of gifted students.

Key words Literature-based reading, Gifted students, Attitude to teaching, Creativity, Botswana.

# **Pre-service teachers' conceptions of environmental education** Modise Mosothwane

It has been suggested that the new century requires environmentally literate citizens. The National Commission on Education of 1993 recommended making environmental education part of teacher education in Botswana. The emphasis was to be on methods of teaching environmental education for pre-service and in-service teachers. The aim was to promote environmental awareness through education among the public, who would then develop the responsible behaviour required if a quality environment is to be maintained. This study assessed pre-service teachers' conceptions of environmental education and the extent to which it has become a component of teacher education

programmes. The subjects were sixty pre-service teachers in their final year at colleges of education. The findings indicate that pre-service teachers have a clear conception of what environmental education means.

Does season of birth matter? The relationship between age within the school year (season of birth) and educational difficulties among a representative general population sample of children and adolescents (aged 5–15) in Great Britain Julia Gledhill, Tamsin Ford and Robert Goodman

Summer-born children perform less well academically and are more likely to receive SEN provision than those born in the spring or autumn. School studies using small samples suggest that summer-born children with learning difficulties perform no less well on age-standardised tests. This article examines the relation between season of birth, SEN, specific learning difficulties and performance on age-standardised measures of IQ, reading and spelling, using data from a large population-based cross-sectional community survey of British children. There were more summer-born children with SEN compared with autumn and spring-born, but no significant differences in IQ, reading ability, spelling ability or specific learning difficulties between seasons. The excess of summer-born children with special needs does not mirror age-adjusted attainment. Teachers' expectations may not allow fully for age variation within the school year.

Key words Season of birth, Youngest in class, Special Educational Needs, Learning difficulties, Cross-sectional community survey.

# Girls' and boys's sense of belonging in single-sex versus co-educational schools H. Brutsaert and M. Van Houtte

The aim was to compare single-sex and co-educational schools in terms of pupils' sense of belonging in the school community. The data were drawn from a survey of sixty-eight academically oriented secondary schools in Flanders. Twenty-five were mixed and forty-three were single-sex (twenty-one girls' and twenty-two boys' schools). Respondents – 3,370 girls and 3,057 boys – were third-year students, aged 14 and 15 years. A multivariate analysis (hierarchical linear modelling) was performed, adjusting for parental socio-economic status, parental support, academic performance, curriculum enrolment, quality of teacher–pupil relations and school mean socio-economic status. The findings mainly indicate that girls, but not boys, feel better integrated in single-sex than in co-educational schools.

Key words Co-education, Gender, Social bonding, Early adolescence, Well-being.

#### Staff gender balance in primary schools Pat Bricheno and Mary Thornton

This article explores the relation between the proportions of male and female teachers in primary schools and pupil achievement at the end of Key Stage 2. It asks, (1) What is the relation, if any, between gender balance and KS2 examination results? (2) Does the gender balance of teaching staff within a school bear any relation to the size, type or achievements of the school? Data were obtained for 846 randomly selected schools in England for 2000–01 regarding the number of males and females teaching in the school, and the sex of the head teacher. Data concerning school roll, KS2 test results and percentage of children with Special Educational Needs were also collected. Analysis indicates that schools with more male teachers are unlikely to get better test results. However, schools with a male Head seem likely to have more male teachers, and male teachers appear to be more attracted to larger schools. Maths results were slightly better in primary schools with a male head teacher.

Key words Staff gender balance, Key Stage 2 results, Male teachers, Primary school teachers, Gender and outcomes.

# Subject leader and class teacher: exploring the conflict of a dual role in a primary school Paul Lunn and Alison Bishop

This article reports how the teachers in a case-study primary school managed their dual role of full-time class teachers and whole-school subject leaders. The part played by the head teacher in this respect is analysed. The study focuses upon the likelihood of conflict between the two roles. The potential for conflict is analysed in terms of the need for a cultural shift among the teaching staff. The study identifies their strategies for coping and concludes by setting the findings in the national context and suggesting ways in which the potential for conflict may be reduced.

Key words Primary, Teachers, Subject, Leaders, Conflict.

# Social capital, students' perceptions and educational aspirations among Palestinian students in Israel Nabil Khattab

One of the worrying questions in studying students' aspirations is why some minorities, despite social disadvantages, tend to develop high educational aspirations, whilst others who share the same social reality develop low aspirations. Using data from representative samples of the ninth and eleventh grades in forty-two Palestinian high schools in Israel, this article suggests a new explanation of educational aspirations among minority, immigrant and working-class students. The results indicate that school settings, social capital and students' perceptions have significant effects on pupils' aspirations. They reveal that the way minorities perceive their chances of success in the educational system and the labour market plays a central role in determining students' aspirations.

Key words Students' aspirations, Minorities, Palestinian students, Social capital, Israel.

# Attention Deficit/Hyperactivity Disorder-type behaviours among undergraduates and their relation to learning style Juliette Alban-Metcalfe

This article investigates the relation between characteristics associated with Attention Deficit/Hyperactivity Disorder and learning style among first-year undergraduate students. AD/HD was measured using a self-report instrument based on the *D.S.M.* IV criteria, and learning style was assessed using Biggs's Study Processes Questionnaire. Three hypotheses were proposed about the relation between AD/HD-type characteristics and (1) a 'deep' approach to studying, (2) an 'achieving' approach to studying and (3) a 'surface' approach to learning. There was support for the first hypothesis in that there were statistically significant correlations between AD/HD factor 3 (hyperactivity/inattention) and the 'deep' approach, and for the second hypothesis in that there were statistically significant correlations between factors 1 (inattention) and 3 and an 'achieving' approach. The third hypothesis was not supported. The results are interpreted in the light of research into the nature and causes of AD/HD and the nature of styles of learning. The implications are discussed for educational provision for students with AD/HD, and areas for further research are identified.

Key words ADHD, Adults with ADHD, Learning styles, Learning difficulties and hyperactivity/inattention.

# Nigerian students' perceptions of academic departments as a teaching and learning environment

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or some decades now, systematic analysis of the learning environment, otherwise called the academic environment, has been on the increase in American universities and colleges and to some extent in British and European universities. There have also been attempts to use certain criteria to delineate the extent of the academic environment. For instance, some investigators have used quantifiable characteristics of the environment such as the number of students, the size of the university, among others (Winteler, 1981), while Stern (1970) measured the learning environment by an 'Organisational Climate Index'. Another early attempt to delineate the academic environment was by Pace (1960, 1972), who developed and measured students' perception of their environment by means of the 'College and University Environment Scales'.

It is pertinent to note that extensive efforts to measure the academic environment were made at the lower levels of the educational system, where Frazer (1986), Frazer and Walberg (1991), cited in Frazer (1993), among others, did many research studies and their findings have provided great insights into classroom learning environments. However, studies of the university environment are not as numerous as those of the lower levels of education. Frazer (1993) attributes the trend to a dearth of measuring instruments at that level.

The role played by students by way of expressing their views through self-report is crucial in analysing the environment. For instance, Paulsen and Feldman (1995) observed that teachers, the courses they teach and how they teach can be evaluated through classroom assessment. Also, students' perceptions provide information on subtle but important aspects of classroom life (Frazer, 1994). Similarly, the validity and reliability of students' assessments of their teachers and learning environment are no longer a bone of contention (Onocha, 1995, 1996; Ramsden, 1979). Frazer (1993, p. 494) puts it succinctly:

Students have a good vantage point to make judgements about classrooms because they have encountered many different learning environments and have enough time in a class to form accurate impressions ... even if teachers are inconsistent in their day-to-day behaviour, they usually project a consistent image of the long-standing attributes of classroom environment.

Research on students' perception of their academic environment (Ramsden, 1979; Gaff et al., 1979; Winteler, 1981) indicates a consensus that distinct and varied cultures exist in the environment. Frazer (1994) observed that the environment, climate, atmosphere, tone, ethos or ambience of a classroom exert a strong influence on students' behaviour, attitudes and achievement. Recent studies such as Lamport (1994) and Baird (1992) also found that the factor of 'student-faculty interaction' as perceived by students has a positive influence on their personal and intellectual growth, career and educational goals. Consequent upon this, the authors advocated increased and improved student-faculty interaction in tertiary institutions. In spite of these established facts, students' views on the learning environment are the area which has been least investigated in Nigeria. There is a dearth of literature in this area of study in Nigeria. This seems to suggest that, in spite of the outcry about improving the environment for students, nothing much has been done to focus systematic research on the area.

Studies such as Onocha (1995, 1996), which serve as forerunners, concentrated largely on students' evaluation of the teaching effectiveness of university teachers. Moreover, these studies are localised within one university and are therefore somewhat restricted. In view of these shortcomings, Okwilagwe (2000) developed and applied an instrument to identify the factors that influence the academic climate in the Nigerian university system. The study found that six factors – the commitment to teaching of lecturers/commitment expected of students; personal attention to students; relations with students; freedom of students' learning; academic guidance and respect for students – appeared to dominate the academic environment associated with undergraduates.

In the light of the foregoing, the purpose of the present study, a follow-up of the aforementioned one (Okwilagwe, 2000), examined, comparatively, the perception of students of their academic environment in five departments (Mathematics and Chemistry, Faculty of Science; Teacher Education, Faculty of Education; Economics, Faculty of Social Science; English, Faculty of Arts) in three Nigerian universities. The study also examined the similarities and differences between these departments in the different universities and suggested ways in which academic/administrative practices and academic environment could be improved to engender effective teaching and learning in the Nigerian university system.

### Research questions

In order to effectively carry out this study, the following research questions were examined:

- 1 What are the students' perceptions of their academic environments?
- 2 In what areas does the academic climate in these environments differ?
- What are the areas of similarity in the academic climate in these environments?

4 In what ways can university practice and the academic experience of students be improved?

#### Method

Sample. The subjects were 348 final-year university undergraduates selected through stratified and judgemental sampling procedures. They were aged between 20 and 29 years.

Instruments. The Scale of Academic Environmental Factors (SAEF) consisted of twenty-seven items which were subdivided into six scales by means of factor analysis. It measured the quality of the academic climate as perceived by students. The students responded to a five-point Likert scale questionnaire in which the polarity was reversed for negative items. The six dimensions of SAEF were adapted from Gaff *et al.* (1976) and Ramsden (1979). As explained in Frazer (1993, 1994) the dimensions of SAEF are closely related to the 'University Environment Scale' classification scheme of Moos (1974) in that his dimensions of relationship, personal development and system maintenance and change between students and their environment are reflected in the items that make up SAEF. Construct validity and internal consistency were established for SAEF using Cronbach coefficient alpha, and the reliability coefficients for the dimensions were between 0.53 and 0.77. SAEF accounted for a total variance of 51.6 per cent on the criterion of academic environment (Okwilagwe, 2000).

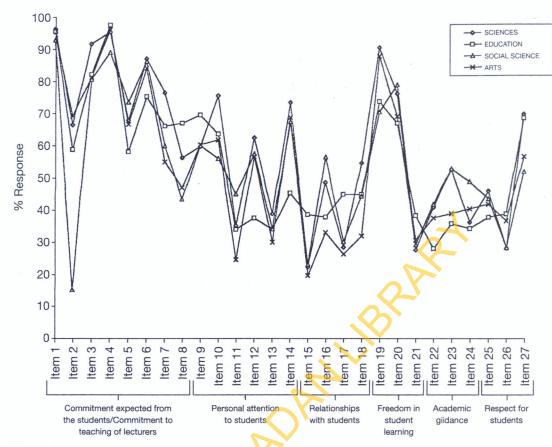
Procedure. The instrument was administered to the students in the last semester of their four-year programme. By implication, the timing presupposed that the students would have adjusted to their academic environment to the extent that their perception of the learning environment would be relatively stable.

## Data analysis

Data were analysed using descriptive statistics such as percentage frequency counts. This enabled the information gathered to be presented in profiles. ANOVA and Scheffe's comparison of means were used to test for significant difference between the academic departments.

#### Results and discussion

The results illustrating students' perception of their academic environment are presented in Table 1 and in profile in Figure 1. Only the items which characterised a greater number of students' departments, in terms of whether they were present or absent, were analysed. In order to avoid duplication of common responses given by students, only those items whose percentage response ranked above average across the four faculties/departments were discussed. These items and their corresponding responses in percentages are denoted b in Table 1.



**Figure I** Profile of undergraduates' perception of the academic environment in the four faculties/departments

**Table I** Percentage positive responses of undergraduates' perception of the academic environment in four faculties

Item	a C	Sciences	Education	Social Sciences	Arts
1	Commitment to work expected of students	96.4	95.7	93.1	94.7b
2	Easy knowledge of whether set goals are				,
	being attained	66.7	59.0	15.3	69.4
3	Absolute dedication to work demanded by				
7	lecturers	91.7	82.1	80.6	81.3b
4	Submission of assignments on schedule	95.2	97.4	88.9	96.0b
5	Clear information often given in course				
	assignments and tests	67.9	58.1	73.6	66.7b
6	Courses offered make me confident in facing				
	the demands of my vocation	86.9	75.2	86.1	84.0b
7	Innovativeness of lecturers in teaching	76.2	65.8	59.7	54.7b
8	Culture of punctuality of lecturers to lectures	56.0	66.7	43.1	46.7
9	Accessibility of information to students	59.5	69.2	59.7	60.0b
10	Approachability of lecturers on academic				
	matters	75.0	63.2	55.6	61.3b
11	Often no discussion of career plans and				
	ambitions with a faculty member	34.5	33.3	44.4	24.0

12	Strong impact of faculty member on students'	61.9	36.8	56.9	56.0
	intellectual development	61.7	30.0	36.9	36.0
13	Departmental counselling and guidance to	20.1	22.2	22.4	20.2
	make students doing poorly stay in school	38.1	33.3	33.4	29.3
14	Courses offered are rich in practical issues	70 (			
	required in future vocation	72.6	44.4	66.7	68.0
15	Often no room for students' interaction with				
	lecturers outside the faculty	21.4	37.6	22.2	18.7
16	Sensitivity of faculty members to students'				
	needs and aspirations	47.6	36.8	55.6	32.0
17	Little contact between lecturers and students				4
	outside the classroom	27.4	43.6	29.2	25.3
18	Allowed a free hand in course selection in the				
	faculty	53.5	43.6	43.1	30.7
19	Irregularity in students' attendance in class				
	frowned upon	89.3	72.6	69.4	86.7b
20	Failure to submit course assignments on time				
	attracts penalty	75.0	65.8	77.8	$68.0^{b}$
21	Often no time for students to concentrate on				
	courses of most interest	26.2	36.8	27.8	29.3
22	Discusses my academic problems with my		¥		
	lecturers	39.3	26.5	40.3	36.0
23	Close supervision of students' work by lecturers	51.2	34.2	51.4	37.3
24	Valuable feedback on examinations given	34.5	32.5	47.2	38.7
25	Lecturers take students' suggestions into account		0 = 10		0 0 17
25	in course planning	44.1	35.9	41.7	40.0
26	No time for students' personal problems by	1 1.1	33.7	11.7	10.0
20	faculty members	26.2	36.8	26.4	34.7
27	Commitment of lecturers to teaching gives me	20.2	50.0	20.1	51.7
21		67.9	66.7	50.0	54.7b
-	a feeling of great worth	0/.7	00./	30.0	34./

Note a Items slightly paraphrased b Items with more than average percentage responses across departments/faculties.

The results in Table 1 and Figure 1 indicate the various academic cultures in the different faculties/departments. For instance, the majority of students in the sciences (Mathematics and Chemistry), education (Teacher Education), the social sciences (Economics) and the arts (English) indicated that they are 'expected to be very committed in their work' (96 per cent, 96 per cent, 93 per cent and 95 per cent respectively), 'be absolutely committed to work' (95 per cent, 97 per cent, 89 per cent and 96 per cent respectively) and 'regularly attend classes' (89 per cent, 73 per cent, 69 per cent and 87 per cent respectively). Also 'they indicated that the courses they offered made them confident in facing the demands of their vocation' (87 per cent, 75 per cent, 86 per cent and 84 per cent respectively). Similarly they indicated that 'they were to submit course assignments on time or be penalised' (95 per cent, 97 per cent, 89 per cent and 96 per cent respectively) while 'clear information was often given with respect to course assignments and tests' (68 per cent, 58 per cent, 74 per cent and 67 per cent respectively), and that 'commitment to teaching of lecturers

gave them a modest feeling of great worth' (68 per cent, 67 per cent, 50 per cent and 55 per cent respectively). In addition they indicated that 'students have fair access to information' (60 per cent, 69 per cent, 60 per cent and 60 per cent respectively) and that 'lecturers were modestly innovative in teaching' (76 per cent, 66 per cent, 60 per cent and 55 per cent respectively).

Besides the positive aspects of the academic climate as denoted b in Table 1, students equally revealed the lack of some positive characteristics of an academic climate in their departments. The results, presented in Table 2, show that except for Education, students in other faculties expressed the view that 'there was no room for students' interaction with lecturers outside their faculties' (52.3 per cent, 50 per cent and 50.7 per cent for students in science, social sciences and the arts respectively), while those in the sciences and social sciences indicated that there was no time to concentrate on courses of academic interest to them (48 per cent and 51 per cent respectively) and that there was 'very little contact between lecturers and students outside the classroom' (46 per cent and 49 per cent respectively). With the exception of social science students, a small percentage of other students asserted that 'they hardly discussed career plans and ambitions with faculty members' (49 per cent, 49 per cent and 47 per cent for sciences, social sciences and the arts respectively). Students in the Faculty of Arts expressed the view that 'they were not allowed a free hand in course selection' in their faculty (45 per cent) while 60 per cent of students in Education 'do not discuss their academic problems with lecturers'.

**Table 2** Percentage negative responses of undergraduates' perception of the academic environment in four faculties

Iten	$n^a$	Sciences	Education	Social Sciences	s Arts
15	Often no room for students' interaction with lecturers outside the faculty	52.3	_	50.0	50.7
11	Often no discussion of career plants and ambitions with a faculty member	48.8	48.7	_	46.7
21	Often no time for students to concentrate on courses of most interest	47.6	_	51.4	_
17	Little contact between lecturers and students outside the classroom	46.4	_	48.6	_
22	Discusses my academic problems with my lecturers	-	58.9	_	_
18	Allowed a free hand in course selection in the faculty	_	_	_	45.3

The areas in which the academic climates in the faculties of the universities were different are presented in Table 3a and Figure 1. These differences were significant at (F ratio 4.5127, 3.8806 and 4.0894; df = 3.344, p < 0.05) respectively.

**Table 3 (a)** Group ANOVA summary table on difference in academic environment by departments for Attention, Relationships and Guidance

Item	Source	DF	SS	MS	F	P	Remark
Attention	Between groups	3	209.73	69.91			
					4.51	< 0.05	5 *
	Within groups	344	5329.09	15.49			
	Total	347	5538.82				
Relationships	Between groups	3	57.20	19.07			
1		*			3.88	< 0.05	· *
	Within groups	344	1690.20	4.91			1
	Total	347	1747.40				H
Guidance	Between groups	3	72.93	24.31		<b> </b>	<b>/</b>
					4.09	< 0.05	*
	Within groups	344	2045.03	5.95		2	
	Total	347	2117.96		.0	X	

Note \* Significant at p < 0.05.

The results in Table 3b–d further show that these significant differences reflect in the way Mathematics/Chemistry and Teacher Education give 'personal attention to their students', the way Teacher Education and English departments 'relate with their students', and the way the Departments of Economics and of Teacher Education 'give academic guidance' to their students.

**Table 3 (b)** Scheffe's summary table of comparison of mean difference in academic environment by departments for Attention

Mean values		Science	Education	Social Sciences	Arts
15.61	Science		*		
17.48	Education				
15.85	Social sciences				
16.51	Arts				

Notes \* Pair of groups that are significantly different at the 0.05 level.

**Table 3 (c)** Scheffe's summary table of comparison of mean difference in academic environment by departments for Relationship

Mean values		Science	Education	Social Sciences	Arts
12.02	Science				
11.72	Education				*
12.12	Social sciences				
12.83	Arts				

Notes  $\,^*$  Pair of groups that are significantly different at the 0.05 level.

Table 3 (d) Scheffe's summary table of comparison of mean difference in academic environment by departments for Guidance

Mean values		Science	Education	Social Sciences	Arts
8.90	Science	1 1			
9.67	Education				
8.56	Social sciences		*		
8.97	Arts				

Notes \* Pair of groups that are significantly different at the 0.05 level.

The academic climate in the departments was similar in some ways. Table 4, in conjunction with Figure 1, indicates that there was no significant difference between the departments in the commitment of lecturers to teaching/the commitment expected from the students (as indicated by items 1, 3–7 and 8), freedom in students' learning (indicated by items 19 and 20) and respect for students (indicated by item 27) at F ratio 2.3323, 1.1430 and 1.2281, df = 3:344, p > 0.05) respectively.

The results with respect to research question 4 indicate that suggestions for improving practice and students' university experience are clustered largely around eight areas.

**Table 4** Percentage positive responses of undergraduates' perception of similarities in the academic environment in four faculties

Iten		Sciences	Education	Social Sciences	Arts
1	Commitment to work expected of students	96.4	95.7	93.1	94.7
4	Submission of assignments on schedule	95.2	97.4	88.9	96.0
3	Absolute dedication to work demanded by lecturers	91.7	82.1	80.6	81.3
19	Irregularity in student's attendance in class frowned upon	89.3	72.6	69.4	86.7
6	Courses offered make me confident in facing the demands of my vocation	86.9	75.2	86.1	84.0
20	Failure to submit course assignments on time attracts penalty	75.0	65.8	77.8	68.0
5	Clear information given on course assignments and tests	67.9	58.1	73.6	66.7
10	Approachability of lecturers on academic matters	75.0	63.2	55.6	61.3
27	Commitment of lecturers to teaching gives me a feeling of great worth	67.9	66.7	50.0	54.7
8	Culture of punctuality of lecturers at lectures	56.0	66.7	43.1	46.7
7	Innovativeness of lecturers in teaching	76.2	65.8	59.7	54.7

On the issue of student-faculty interaction, 63 per cent of the students advocated 'an open-door policy which allows a more cordial relationship to develop between students and lecturers'. According to them, this would encourage a situation where academic problems could be discussed in the universities. A good proportion of the students, 20 per cent, also indicated that lecturers should be more interested in students' problems, 'making themselves approachable outside the classroom', while 15 per cent expressed the 'need for an improved student-lecturer classroom interaction'.

On academic performance-related matters, 43 per cent of the students indicated a need for improvement in teaching standards, the provision of teaching and learning facilities and equipment for practical work, 23 per cent indicated that 'lecturers should be punctual to lectures and provide valuable feedback on tests and examinations', 3 per cent indicated that 'a review of the academic content of some courses was necessary to make than relevant in modern times', while 18 per cent indicated that 'students should be allowed to make a substantial contribution to issues relating to their academic courses'.

On students' attitude to academic work, 23 per cent indicated that lecturers should emphasise the need for regular and punctual attendance at lectures and for students to show more commitment to their academic work, while lecturers should refrain from generalising about students' not taking their studies seriously enough because not all are guilty. The results also show that 15 per cent expressed the 'need to impose stiff penalties on students who fail to submit assignments or engage in examination malpractices' while only 3 per cent indicated that students whose performance is outstanding should be encouraged.

With respect to the provision of academic resources and other support systems, 23 per cent are of the view that 'the libraries should be stocked with up-to-date books, journals and reference materials'. As many as 13 per cent of the students expressed the need for 'guidance on registration for courses so as to avoid registering for irrelevant courses' and a review of 'the recently introduced Cumulative Grade Point Average (CGPA) method of assessment'. In addition, 8 per cent wanted tutorials to be organised for students, while 5 per cent felt that 'existing counselling services should be improved and put within easy reach of students'. Only 5 per cent of the students indicated that 'enlightenment programmes on career prospects in their chosen discipline should be organised for them early at the 100–200 levels of their programmes'.

On the provision of information and the effectiveness of the approach to communication, 10 per cent of the students said that there should be a 'free flow of information between students and lecturers on the one hand and between students and administrative staff on the other', while 3 per cent felt that there should be 'effective communication between the university administration and students on student-related matters'. Moreover, 13 per cent said that 'non-academic members of staff should be more responsive to students' needs and they should be made more responsible for them'.

On the provision of accommodation and other amenities, 20 per cent of the students felt that their accommodation, hostel facilities and amenities such as lighting and running water should be improved, while 3 per cent felt that adequate recreational facilities should be provided in addition to the physical environment being kept clean for aesthetic reasons.

With respect to suggestions about other issues relating to administrative and policy matters, 3 per cent felt that there should be a more restrictive policy on admissions so as to reduce the pressure on facilities, while 3 per cent felt that the culture of accountability should be absorbed by university administrators. In addition, 18 per cent of the students felt that university staff should be adequately motivated by the authorities to meet their demands in time.

On the issue of technological development, 20 per cent were of the view that computer education should be provided for all students while the whole university system should have adequate computer facilities and be connected to the internet in order to keep abreast of global development.

One of the major findings of the study was that different academic climates exist in the various departments of an academic institution. For instance, in the Mathematics and Chemistry Departments (Faculty of Science), the consensus of the majority of the students is that relations between lecturers and students are formal and less friendly than they might be, as there is little or no contact outside the class and faculty. This corroborates Ramsden (1979), who found that students were expected to be very committed and dedicated to their academic work, doing assignments and examinations and attending lectures regularly. The students, however, felt they did not have enough time to concentrate on the courses of most interest, although they had been given a free hand in selecting courses. Students were quite accessible to information, while lecturers had a strong influence on their intellectual development. In addition, the courses offered were full of the practical issues relevant to the students' vocations. These findings corroborate Gaff et al. (1976) and Ramsden (1979).

In the Teacher Education Department (Faculty of Education) students held the view that the relationship between students and lecturers, unlike in the English Department, was very formal. However, there was a consensus that, unlike in the Economics Department, less academic guidance was given by their lecturers, despite the seemingly informal, co-operative learning environment outside the class and the faculty. The personal attention paid to students by lecturers on academic matters and the availability of information differ considerably from the situation in the English Department. In addition, the students were not convinced that the courses on offer included enough of the practical skills necessary for a vocation.

Students of the Department of Economics (Faculty of Social Sciences) were of the view that the process of learning is formal. This finding contradicts Ramsden's (1979) findings. Student–faculty interaction was minimal. Academic guidance was adequate compared with the Faculty of Education, as feedback on examinations, discussion of academic study plans and problems was possible. However, students said they had not enough time to concentrate on the courses of their choice. This finding corroborates Ramsden's (1979) view that 'students think that they have too little time to concentrate on subjects that

really interest them'. The students felt also that it was difficult for them to know how they were doing academically. It was their perception that the lecturers were not very committed to their lectures yet total commitment was expected of them. The students were expected to attend lectures regularly, do their assignments and submit them on schedule, and sit their tests and examinations

In the Department of English (Faculty of Arts) students were of the view that the relationship between lecturers and students was very formal. Few were sure they had enough time to concentrate on the courses they were interested in or that students doing poorly received help in the form of counselling or guidance, although they were expected to be very committed to their academic work, attend lectures regularly and cope with assignments, tests and examinations. The students also indicated that they were not free to select their own courses, nor was there adequate guidance in terms of giving them feedback about examinations and close supervision of their work.

Another significant finding of the study was that some deficiencies were common to many departmental cultures. The consensus among students would seem to suggest that in more than one department lecturers were not seen as sufficiently committed to teaching yet students were expected to be completely committed, attending lectures without fail, submitting assignments on time and taking tests and examinations. Most students also had a considerable amount of discretion in choosing and organising what they want to learn. It is worth observing that two teacher qualities – punctuality at lectures and innovativeness in teaching – were consistently rated low by students in English and Economics Departments as against Education, Mathematics and Chemistry. This spells a negative implication for teaching and learning in the two departments.

The study equally revealed that a significant difference does exist between faculties/departments on pertinent aspects of the intellectual, social and psychological climate in the academic environment. Differences exist between some departments in the personal attention given to students in terms of student-faculty interaction, the academic guidance students are given and relations with students in terms of the help and understanding they are given. These are strong indications of the existence of different cultures in the academic environment, and the extent of the rapport that is established between students and lecturers. Whether these differences exist because of the distinct curricular requirements peculiar to each discipline/department or are 'manmade', as suggested in Gaff et al. (1976), is a question that would require further investigation. The findings tend to suggest that a formal and businesslike academic climate exists in Economics Departments (social sciences) unlike the informal climate reported by Gaff et al. (1976) and Ramsden (1979), while the formal and businesslike atmosphere pervading the sciences (Mathematics and Chemistry) seems to corroborate the findings of previous investigations.

The students who participated in the study made suggestions for improvements in practice and their university experience (academic environment). Their suggestions touched on varied aspects of university, from academic issues to student–lecturer relations: the provision of better resources and

other academic support systems, the need for students to show commitment to their work, improved accommodation and amenities, more information, effective communication and responsiveness on the part of non-academic staff, other issues relating to administrative and policy matters and issues of technological development.

There is no denying that frequent student-faculty or student-lecturer interaction, formal or informal, according to Endo and Harpel (1982) and Lamport (1994) is essential to the realisation of the academic aspirations of most university students. A sympathetic ear now and again can go a long way towards therapy for physical and emotional problems well before actual remedies suggest themselves. To a large extent these claims seems to be confirmed to by most of the students' suggestions. Students value an academic environment where lecturers take an interest in their problems and are accessible and approachable, and a classroom atmosphere conducive to effective teaching and learning through proper student-lecturer interaction.

Students put a high premium on a learning environment where facilities are modern and adequate, teaching standards are high and lecturers are committed to their work, information is readily available, the physical surroundings are attractive, halls of residence are comfortable and modern recreational facilities are provided. Perhaps, since they know what it means to have a sound education, they are concerned about their prospects, as some courses are out of date and have little real utility, given the way practical classes are handled and the state of the laboratories.

Students recognise that if they are to win better academic conditions they have a significant role to play in bringing change about. They recognise that their success depends heavily on the level of commitment they bring to their academic work. While not all guilty of indolence, they admitted that some needed to face up to the challenges of academic work, attending classes more conscientiously, writing term papers/assignments on schedule, desisting from exam malpractices or face the stiff penalties meted out to those guilty of cheating. In addition, they expect academic support systems – in terms of organising tutorials, guidance at appropriate times, improved and accessible counselling services, encouragement for outstanding students, non-academic staff responding to their needs, feedback on examinations, functional libraries and opportunities to contribute meaningfully in matters relating to their academic well-being.

Students are encouraged by a university system where effective communication and dialogue with them are top priority in resolving issues, and administrators are firm on policy issues such as admission control, where a maintenance culture is imbibed, where accountability is the watchword and where a responsible administration is sensitive to their teachers' welfare. Students are, however, concerned at the slow pace of technological progress as reflected in the continuing failure to computerise the universities and open up the Internet to them.

In conclusion, the study indicates the existence of distinct cultures in the various disciplines/departments in an academic environment. Students' responses

on the academic environment scale served not only as a measure of their perceptions but as a device for assessing the quality of courses, lecturers, and the organisation and management of the programmes designed for them. The findings in respect of lecturers' commitment to teaching, attention to students, academic guidance and regard for students have implications for teaching and learning in Nigerian tertiary institutions. It is reasonable to expect that in addition to giving quality academic guidance lecturers should be fully committed to their lectures, as they have the motivational power to get students interested in the courses they teach. Faculty members (academic and non-academic) should provide an enhancing and supportive academic environment which encourages students to develop a positive attitude to academic work as well as high academic achievement.

The students' suggestions for improving practice and the university experience are further indications of the need for change and modernisation of the university environment in Nigeria through the restructuring of programmes, policies and procedures to make the system more dynamic. The university personnel (lecturers and administrators) students and other stakeholders in tertiary education should develop a seriousness of purpose that would enable the Nigerian university system to attain its desired goals.

#### References

- Baird, L (1992), 'How to improve your college's intellectual outcomes', *Planning for Higher Education* 20, 7–11.
- Endo, J. J., and Harpel, R. L. (1982), 'The effect of student-faculty interaction on students' educational outcomes', Research in Higher Education 16 (2), 225–38.
- Frazer, B. J. (1986), Classroom Environment, London: Croom Helm.
- ——(1993), 'Research on classroom and school climate' in D. L. Gabel (ed.), Hand-book of Research on Science Teaching and Learning.
- ——(1994) 'Classroom environments', in T. Husen and T. N. Postlethwaite (eds), The International Encyclopedia of Education, second edition, II, Oxford: Pergamon Press.
- Frazer, B. J., and Walberg, H. J., eds (1991), Educational Environments: Evaluation, Antecedents and Consequences, London: Pergamon.
- Gaff, J. G., Crombag, H. F. M., and Chang, T. M. (1976), 'Environments for learning in a Dutch university', *Higher Education* 5, 285–99.
- Lamport, M. A. (1994), 'Student-faculty informal interaction and its relation to college student outcomes in Christian college settings: research and implications', Research on Christian Higher Education 1 (1), 66–78.
- Moos, R. H. (1974), The Social Climate Scales: an overview, Palo Alto CA: Consulting Psychologists' Press.
- Okwilagwe, E. A. (2000), 'Developing and validating Academic Environmental Scale for Nigeria Students (AESFNS)', Nigerian Journal of Educational Evaluation 1 (1),
- Onocha, O. C. (1995), 'Students' evaluation of educational quality: validation research in Nigeria', Nigerian Journal of Clinical and Counselling Psychology 1 (1), 31-9
- ——(1996), 'Stability of students' evaluation of university teaching', Nigerian Journal of Clinical and Counselling Psychology 2 (1), 35–50.
- Pace, C. R. (1960), 'Five college environments', College Board Reviews 42, 24-8.
- ——(1972), College and University Environment Scales, second edition, Princeton NJ: Educational Testing Services.

Paulsen, M. B., and Feldman, K. A. (1995), 'Taking teaching seriously: meeting the challenges of instructional improvement', ERIC Digest.

Ramsden, Paul (1979), 'Student learning and perceptions of the academic environment', *Higher Education* 8, 411–27.

Winteler, A. (1981), 'The academic department as environment for teaching and learning', *Higher Education* 10, 25–35.

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