

# Academic Achievement at the University of Maiduguri: A Survey of Teaching-Learning Environment

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## Abstract

This study assessed the teaching-learning environment at the University of Maiduguri. The study used survey design. The population comprised of the 77 academic departments in the eleven faculties at the University of Maiduguri. A total of 29 departments were randomly and proportionally drawn from the 77 departments. The smallest sample (21 percent) was drawn from the College of Medical Sciences having the largest number of departments. The second level of sampling was for respondents. Average of 20 lecturers per department was estimated targeting 50 percent of them. A norm of 20 students for each of the departments was used. Results shows that among others institutional contribution to the quality of teaching learning environment is 51 percent; individual contribution is 53 percent; lecturers contribution is 55 percent. The study concludes that the overall quality of the environment for teaching and learning at University of Maiduguri is sub-standard. Thus the study recommends among others that the University management should be committed to planned intervention to bring about the required changes.

**Keywords:** Academic Achievement, Teaching-Learning Environment, Students Characteristics, Departmental Characteristics, Faculty Characteristics, University Characteristics

## INTRODUCTION

The Nigerian university system is currently facing a crisis of increasing student population without a corresponding rise in the level of infrastructures, human and material resources essential for processing the teaming population of students. According to UN reports on Nigeria (UN-2001) the standard of university education declined sharply in the decade leading to the year 2000. The graduates produced in Nigerian universities were said to be of "low quality." The cause of the decline was attributed to:

1. Inadequate financing
2. Poorly paid and trained academic staff
3. Insufficient and irrelevant learning materials
4. Outdated equipments and facilities
5. Outmoded and inflexible management structures
6. Unplanned expansion of enrolment and irrelevant curriculum

The report also observed noticeable short comings in (a) oral and written communication in English language among students and (b) in applied technical skills. Although the situation of higher education in Nigeria has changed in the last seven years since the UN report, with substantial increase in the number of universities and provision of infrastructures, many of the problems listed above are still very present in the system. Indeed, recently, in 2010, the government, responding to acute shortage of admission vacancies in the universities, established nine new universities, sited in the six geo-political zones in the country. Lamenting the plight of higher education in Nigeria, Ipaye (2007), in a keynote address on higher education reforms, observed:

In virtually every aspect of the world of work and the job market, it is becoming increasingly clear that the Nigerian university graduate could no longer fit in, unretouched. (P. 2)

The author also underscored some of the underlying problems of performance in higher education as poor infrastructure and teaching facilities; low capacity building; inadequate funding; large student population; poor student support facilities; weak governance and administrative structures, and so on.

In particular, the problem of academic under-achievement among undergraduate students, the subject matter of this research, may not be completely localised within the university institution. To address the problem adequately will require the recognition of the linkages of the educational levels (primary, secondary and higher education). Learning difficulties at the lower levels are exported to the higher levels, thus, negatively affecting the teaching-learning environment at the latter level.

Environment of education in Nigeria is largely unfavourable for high academic achievement (Longe, 1991). Many schools, colleges, and higher institutions are still characterised by shortages and lacks in infrastructures, facilities, and materials thus, compromising the quality of teaching and learning (Jiboyewa, 2007). This survey of teaching-learning environment characteristics at the University of Maiduguri is motivated by the researchers' observation of steady and persistent decline over the years in the level of achievement among undergraduate students of this institution. Presented below are three tables of summary of graduating students in the selected departments during 2003/2004/2007, and 2007/2008 academic sessions.

**Table 1: Summary of Results for Graduating Students (2003/2004) in Selected Departments**

S/No	Departments	Total No. of Students	Total No. of deferred Students	Percentage Deferred
1.	Geography	152	81	53.28
2.	Agric Econs	85	32	37.64
3.	Human Anatomy	51	17	33.33
4.	Bio- Chemistry	77	45	58.44
5.	Education	107	89	83.20
6.	Health Education	51	26	50.78
7.	Accountancy	206	112	54.36
8.	Mech. Engineering	80	36	15.00
9.	English	55	44	80.00
10.	Languages	76	72	99.73

Source: Senate Papers; 2003/2004 University of Maiduguri

**Table 2: Summary of Results for Graduating Students (2005-2006) in Selected Departments**

S/No	Departments	Total No. of Students	Total No. of deferred Students	Percentage Deferred
1.	College of Med. Sciences (MBBS VI)	112	69	61.60
2.	Arabic and Islamic Studies (Addendum)	13	10	76.92
3.	Geography	72	66	91.66
4.	Education	585	261	91.66

Source: Senate Papers: 2005/2006 University of Maiduguri

As this report is being compiled, the following results (Table 3) came in for consideration at the Senate meeting scheduled for October 2008.

**Table No.3: Summary of Graduating Students (2007/2008) in Selected Departments**

S/No	Departments	Total No. of Students	Total No. of deferred Students	Percentage Deferred
1.	Chemical Engineering	28	25	89.28
2.	Library Science	25	19	76.00
3.	Food Science	34	28	32.35
4.	Animal Science 20 (Addendum)		18	90.66
5.	Biological Sciences	95	66	69.47
6.	Sociology and Anthropology	349	320	91.69

Source: Senate Papers, October 30, 2008 University of Maiduguri

A deferred student by definition is someone who has failed one or more courses required for graduation. A great majority of the students deferred usually have failed three or more courses required for graduation. The justification for our investigation may be clearly shown in tables 1-3. This random sample of results seems to indicate consistent pattern of failure in many departments. It is on the strength of this data and the researchers concern about the declining level of achievement at the University of Maiduguri that a proposal to study the academic environment was submitted to the University authority in September 2007. The proposal was approved in October 2007 and work started shortly afterwards.

### **Objectives of the Study**

The major concern in this survey was to uncover the institutional (university and departments) and individual (Staff and Students) characteristics militating against teaching and learning at the University of Maiduguri. Guided by a single research question - why do students fail? - The study specifically sought to determine:

1. students characteristics impinging on their learning and academic performance.
2. departmental characteristics affecting lecturers and students performance.
3. faculty characteristics affecting students' academic performance.
4. university characteristics related to students academic performance.

### **Statement of the Problem**

Educational environment both the internal and the one external to the institution, is a critical factor to organizational effectiveness (Jiboyewa 2007). An environment characterised, for instance, by overcrowded classrooms, inadequate teaching learning materials and facilities, and demoralised staff, is not likely to lead to optimal academic performance for both students and teachers. As indicated in the background section of this Report, there is a steady decline in the level of achievement among undergraduate students at the University of Maiduguri. Based on the researchers observations over the years, it is strongly believed that the internal environment of the University, featuring the infrastructures, facilities, equipment and materials for teaching and learning and a variety of interactions between staff and students contribute significantly to the outcome observable in students performance. The problem of this study is therefore centred on determining how the interplay of the four critical factors, itemised above, define the teaching - learning environment at the University of Maiduguri.

These factors are students, departmental, faculty and university characteristics affecting students and staff academic performance. In addition to these variables the study examined the contribution of other critical factors such as space, facilities, equipments, materials, and students perception of the teaching - learning environment. The thrust of the investigation is thus, a holistic assessment of the environment where teaching and learning take place at the University of Maiduguri

### **Review of Related Literature**

#### **A. Conceptual Frame of Reference**

The conceptual frame of reference for this study is partly based on open system theory that stresses the interdependence among various groups in the organization and their internal environment. This interdependence is necessary for optimal performance of staff, students, and administrators (Katz and Khan, 1996). Environment of organization may be rich or depressed depending on the resources and facilities available for goal attainment. Environment has impact on the values, attitudes and behaviours of the students and staff (Hamid, 1999). Besides the system theory, this study is also partly based on transformational leadership theory.

According to Allix (2000), transformational leadership is a relationship between leaders and followers that has an enduring purpose and which is grounded in the wants, needs, aspirations and values of the followers. The pursuit of "common purpose" is thus, central to the exercise of transformational leadership. Leadership in the transformational mode is seen as inseparable from the needs and goals of followers. Purposes for both leaders and followers are fused; power bases are linked in mutual support, and the relationship is elevating for both parties. Within the context of this study, leadership relationships exist between deans and faculties and their heads of departments; between heads of departments and their lecturers; between lecturers and their students.

This is a leadership within educational organizations, in the transformational mode, will occur only in the transformation of human wants into needs and their satisfaction (Burns 1998). Transforming of individuals and their environment, according to this theory, should be a primary goal of educational organizations.

## B. Related Literature

Contemporary state and federal universities in Nigeria are facing numerous problems. A lot of these have been attributed to inadequate financial resources over which government has been criticised for lack of commitment. Longe Commission in their Report (1991) specifically called attention to the deplorable state of teaching - learning in Nigerian universities. These constraints include:

1. Increasing student population without increase in facilities and equipment.
2. Outdated and dilapidated laboratories, workshops, equipment, and facilities.
3. Inadequate teaching learning space, laboratories, chemicals and materials,
4. Outdated textbooks and journals.
5. Inadequate and irregular funding for research, conferences, and workshops.
6. Unreliable provision of basic infrastructures such as electricity, housing, water, and roads.
7. Shortage of qualified manpower particularly in the sciences and engineering.

Shedding more light on the problems, Ipaye (2007) states that the National University Commission (NUC) has found that one of the areas affecting quality education in the university is overpopulation. In spite of the fact that NUC has specifications for the size of laboratories, lecture rooms, theatres, facilities, and students' intake, universities are taking more than they can carry. Short and intensive training programmes and courses available to university teachers in the past are no longer in existence today. Exchange programmes for university staff are practically abolished; staff are no longer sponsored to foreign universities in appreciable number as was formally the case. Ipaye (2007) further observed that many universities spend far less than expected on goods and services that directly support teaching and learning. Inadequate output from the post graduate programmes in the face of rising enrolment has left the university system meeting only 48 percent of its estimated stall needs.

Student affairs offices and their personnel no longer have the much desired interactions with student individually. The student has become a "distant figure known only on paper" by the university; interacted with through his or her ID number but identified in person only when he or she misbehaves. Ipaye attributes these problems to student population explosion; shortage of academic staff; acute lack of adequate lecture rooms and other facilities that support tutorials and interactions with students in smaller, face to face, group situations. Furthermore, the author states that lecturers are burdened with many classes to teach and large number of students' projects to supervise. A peculiar dimension of this problem is that many lecturers at the University of Maiduguri have had to spend considerable amount of their academic time compiling academic data for large number of students. This routine administrative exercise freezes much of the time available for teaching and research activities.

Among the major goals of the university education worldwide are teaching, research and public service (Longe, 1991). It is largely through the key functions of research and teaching that the university organization performs its varied responsibilities to the society. Research in particular is fundamental to the sustenance of the university as an academic institution (Jiboyewa, 2005). It is critical for effective teaching and paramount for the development of the society as a whole. Research facilitates inculcation of the values of curiosity and critical disposition among students; it conditions the researcher and the learner to be thorough, disciplined, and industrious in the academic process. Furthermore, it encourages advancement of learning for its own sake and for the solution to academic and societal problems.

Unfortunately, however, the poor research environment in the Nigerian university system has impacted negatively on staff and students' academic output. A great many of our students and lecturers do not have access to relevant and current textbooks and journals in their various subjects. Learning activity among students is often reduced to note copying; photocopying from limited materials; passive absorption of sketchy theoretical information without practical exposure to test ideas or theories in concrete situations. Access to internet facilities is still limited to both staff and students. Even when such facilities are readily available, limited electricity supply compromises accessibility for both students and staff. Although ICT is a valuable technology for research and teaching, it cannot substitute for standard and current textbooks and journals in the relevant disciplines. Teaching - learning process is likely to weaken in an environment characterised by reduced opportunity for research.

Funding is another critical dimension of the problems confronting university education in Nigeria. It is a major constraint to research and development in all aspects of the academic process including teaching. Solutions often suggested at conferences and workshops include establishment of viable commercial projects and consultancy in

service oriented programmes in Engineering, Agriculture, Education, Veterinary and Medical Sciences, etc. As alternative sources to funding, these are relevant and helpful programmes. Many universities are currently engaged in these and other projects as means of augmenting their incomes. However, those commercial ventures are very inadequate in meeting the huge financial requirements for university education.

The World Economic Forum (WEF, 2007) ranked Nigeria 108 out of 131 world economies in the areas of general infrastructure, health, primary education, higher education, labour market efficiency, technological readiness, etc. It is clear from this and other indices that Nigeria is not investing adequately in human resource development. This is particularly disturbing in view of the fact that education is a most critical factor for transforming society and improving the lots of individuals, institutions, and various groups. As a major stakeholder in education, government must provide adequate financial support and infrastructures for education at all levels with particular attention to higher education.

Professionalism is another issue in effective delivery of education at the university level. A qualified professional functions best in an environment where he is allowed to practice with the desire to build a reputation for his expertise and contribute to the development of society. Such an environment for education must include infrastructures, facilities, equipment, and materials for training professionals, teachers, and administrators. Effective teaching and learning is compromised in an atmosphere devoid of appropriate stimulation and value orientation (Jiboyewa, 2005). Professional growth and development among staff is directly linked to a resourceful environment characterised by commitment to excellence in teaching and learning. An environment characterised by deficiencies in human, material, and physical resources cannot lead to optimal professional growth for staff and students.

According to Akinkugbe (1994) it is not only human resources, facilities, and materials that are inadequate in our educational system, the atmosphere of deprivation itself engenders strain in human relations and thus creates problem of effective rapports between management and staff; among staff; and among students. Also of particular importance to the academic process and its output is the management. This sector shoulders the greatest responsibility for the overall effectiveness in education, since it must not only define the goals, it must also create the necessary structures for achieving them. Teacher effectiveness and students' achievement, for instance, are related to managerial competency. It is the management initiatives that define the institutional culture of hard work and commitment to collective goals. Managerial activity in our educational system needs to be more focused on the central goals of teaching and learning and on meeting the varied needs of teachers, students, and support staff for academic excellence.

## **METHODOLOGY**

As stated in the objectives, the main goals are to document the institutional and individual characteristics affecting teaching and learning at the University of Maiduguri. To achieve this, a 25 - item questionnaire was designed to find out what lecturers and students experience and how they cope within the teaching- learning environment. The questionnaire was structured into four sections corresponding to the four main factors: (1) institutional characteristics (2) teacher characteristics (3) departmental characteristics and (4) student characteristics. In addition, an 11 - item student questionnaire was used to assess students' perception of the teaching - learning environment. The third instrument employed in the survey was the check - list aimed primarily at assessing space, facilities, equipment and materials available for teaching and learning in all faculties.

Both instruments were structured on a 5 - point Likert type scale. Responses showing favourable or positive characteristics were scored with a maximum of 5 points, while those showing unfavourable or negative characteristics were scored minimum of 1. A maximum of 125 points is thus, possible on the lecturers' questionnaire, while a maximum of 55 points is obtainable on the students' questionnaire. The checklist instrument was structured into a response mode of "available" or not "available" and "adequate" or "inadequate" if available. An item scores 1 point if available, 0 if not available. Similarly, if the condition of the item is satisfactory or adequate it scores 1 point; otherwise it scores 0. A maximum of 12 points is thus, possible for space; 8 points for facilities, and 20 points for equipment and materials. A total of 40 points is possible on this instrument. It should be noted that the checklist was constructed based on the guidelines of NUC for teaching - learning space and facilities in the university system. Quantification was done by statistical means, standard deviation, percentages according to departments and faculties.

Both the lecturers' and students' questionnaires were pilot tested using subjects from the instruments which did not feature in the sample. A correlation of odd and even number scores on the lecturers' questionnaire yielded a

reliability index of .65. A similar computation for the students' questionnaire produced an index of .68. Both instruments were thus, considered reliable in terms internal consistency and adequate for the purpose of this survey.

### **B. Population and Sample**

In scope, the survey covered the entire academic units of the university, particularly those concerned with teaching undergraduate students. The population thus comprises the 77 academic departments in the 11 faculties at the University of Maiduguri during the time of survey. A total of 29 departments (sample) were randomly and proportionally drawn from the 77 departments, representing 2 percent of the population (Table No. 4). The smallest sample (21 Percent) was drawn from the College of Medical Sciences having the largest number of departments. The proportion is still statistically representative, since the selection procedure was strictly random. Although copies of the three instruments were distributed to lecturers and students in the 29 departments, only 26 departments returned useable questionnaire for data analysis. The final sample for this study was thus 26 departments as shown in the tables.

The second level of sampling was for the respondents: lecturers, heads of departments, and students. Average of 20 lecturers per department was estimated and therefore, targeted 50 percent of them. Thus, 10 questionnaires were distributed randomly among staff in each of the sample departments. In departments with less than 10 lecturers the entire population was considered. In those with more than 10 lecturers questionnaires were distributed at random to lecturers available. The response rate on the average was between 60 and 70 percent, and this was after several follow up contacts to the departments.

Among the students, a norm of 20 students for each of the sample departments was used, twenty student questionnaires were thus, randomly distributed to students in specific departments. Among the students, the return rate was on the average 90 percent. It should be noted that in spite of approval from the Deputy Vice-Chancellor, Academic, the field assistants encountered difficulties as some departments were unwilling to cooperate with the researchers. However, with repeated calls and appeals the researchers were able to secure enough cooperation to achieve the purpose of the study.

## **V. RESULTS**

As indicated in the problem statement segment of this report, the four key variables of the study are: (F1) university (F2) lecturer (F3) department and (F4) student characteristics contributing students' performance in the various departments. The results of this study (staff questionnaire) therefore were organised along these variables faculty by faculty (Table No. 6) and according to the sampled departments (Table No. 7). Before commenting on the data, a brief summary of these factors are presented below.

### **A: Faculty Profile: Main Factors**

#### Staff Questionnaire Contents

#### F1: University

1. hostel accommodation
2. entry requirements into degree programmes
3. teaching-learning space
4. library and health care service

#### F2: Lecturer

1. lecturers' academic qualification
2. lecturers' consideration for students needs
3. lecturers' motivation for work
4. lecturers teaching load

#### F3: Departments

1. interference in the departmental process by the university administration
2. availability of adequate teaching - learning space
3. adequacy in number of academic and support staff
4. availability of departmental library

#### F4: Student

1. whether students meet the NUC requirements for admission



2. whether poverty or socio economic background affect students achievement
3. students proficiency in oral and written communication
4. whether students have appropriate forum for dialogue with their lecturers

Staff are to rate the extent to which these qualities are observable in their departments. Negative qualities attract lower scores while positive ones are scored higher on a 5- point scale. This background information would assist a better understanding of the data presented in tables 6 and 7.

Faculty profile on the four factors is represented in table No. 6. Maximum possible score on the scale is 125 with a scale mean of 65. The highest score on the scale (79.5) is recorded for the Faculty of Law while the lowest (54.6) is for the Faculty of Arts. It is noteworthy that several scores on the four factors actually fall below the scale mean of 65 while the few that exceed the mean were not significantly so, except that of the Faculty of Law. Lower scores indicate that the desirable qualities are not there insufficient quantity for students' academic performance. A score must substantially exceed the scale mean in order to be judged a positive index of factors contributing to students' achievement, Looking at the mean scores for all the faculties (Table No. 6) on the four factors, one finds that F1 (14.75) is below the sub- scale mean of 15; F2 (16.38) is slightly above; F3 (18.45) is slightly above its scale mean of 17.5; and F4 (15.05) is exactly at the sub scale mean of 15. All of these indicate that the qualities needed for students' high performance 6 are not substantially present in all the faculties.

### **B. Departmental Profile: Main Factors**

The departmental profile on the four factors are presented in Table No. 7. It is evident from table 7 that all the 26 departments scored slightly below or above the subscale mean of 15 on the four factors. On the aggregate score, Education department ranked the lowest with 52 points while Sharia Law recorded the highest score of 79 points. It is significant to note that 16 out of the 26 departments or precisely 61.53 percent scored below the scale mean of 65 points. Table No. 8 provides data on space, facilities, equipment and materials for the faculties.

### **C. Academic Infrastructure**

Effective teaching and learning environment is also characterised by adequate space, facilities, equipment and materials. A checklist, constructed with the NUC guidelines was used to survey the availability and adequacy of these factors in the faculties. The maximum score on space is 12 points; facilities, 6 points; equipment and materials, 18 points. A maximum total on these items is 36 points. Faculty variation is accounted for by quantifying scores in percentages. Thus, Faculty of Law records the highest percentage of 3.75, while Faculty of Science scored the lowest with 9.76 percent. For the other faculties, the extent to which these Factors are available and adequate is thus 23.95 percent, to say the least, this is a dismal picture of teaching-learning space, facilities, equipment, and materials at the University of Maiduguri. Mean and percentage scores on the factors are indicated for all the faculties on table No. 8.

The departmental profile on space, facilities, equipment and materials is presented in Table No. 9. The department of Sharia Law records the highest percentage of 46.6 followed by the department of Computer Engineering with 45.58 percent, and the department of Veterinary Pathology with 42.96 percent. The lowest percentage on the table is recorded for the department of Business Management with 3.33 percent.

### **D. Students Perception**

The third main instrument employed in data collection is the students' questionnaire. It is a survey of students' perception of the teaching-learning environment in their various departments and in the university as a whole. In summary the instrument measured on a 5 point scale the extent to which the following conditions contribute to students' academic performance.

1. Accessibility and friendliness of lecturers to students
2. Proficiency in use and understanding of English language
3. Whether family background and overcrowded classroom interfere with learning and achievement
4. Adequacy of teaching and learning space and facilities in the university

A maximum of 55 points is possible on the questionnaire with a scale mean of 33. Students' response is highly positive in all the faculties in sharp contrast to lecturers' views and the depressed conditions of space and other facilities for teaching and learning. In all the faculties, students recorded 67.27 percent favourable condition of the academic environment. The College of Medical Sciences recorded the highest score of 77.45 percent on students' perception, followed by the Faculty of Arts with 75.81 percent and the Faculty of Education with 70.18 percent.

In constructing the staff questionnaire, we had included three items which, according to several academic staff with whom we interacted before the survey, strongly affects students' performance. These items are (1) students entry qualification (2) students' proficiency in oral and written communication in English language, and (3) whether departments are used as dumping ground for unqualified students. Responses to these items were quantified separately for all the faculties. On the first item (students' entry qualification) sixty-percent of staff in the 11 faculties feel that most students admitted do not meet the NUC admission requirements. The result on the second item (students' proficiency in oral and written English) shows that sixty-one percent of staff in the 11 faculties were of the views that majority of our students were not skilled in oral and written communication in English. On the third item (whether departments are used as dumping grounds) seventy-seven percent of the staff in the 10 faculties reject the views that their departments are used as dumping ground for unqualified students. However, in Education department, 90 percent of the lecturers believe their department is used as a haven for unqualified students.

## VI. DISCUSSION

Discussion of findings is organised according to the three main instruments employed in data collection: (1) staff questionnaire (2) checklist and (3) students questionnaire. Attempts are made in this section to shed light on the problems of the teaching-learning environment and to answer the only research question of this survey: why do students fail?

### A. Staff Questionnaire

As indicated earlier in Table No. 3, the staff questionnaire measured the four key variables of the study. The first one, university factor records a mean of 1.16. On the basis of this result, the university is below average in the provision of hostel accommodation for students; in meeting NUC entry requirements into degree programmes; provision of teaching-learning space; and provision of library and health care services. The second factor, lecturer characteristics, is slightly above the subscale mean of 15.6. Based on this finding the university is a trifle above average in terms of lecturers' academic qualification; lecturers' consideration for students' needs; lecturers' motivation to work, and lecturers' teaching load. Obviously, there is a considerable need for improvement in both areas if the present low level of achievement among students is to be addressed realistically.

With regards to the third factor, departmental characteristics, the 11 faculties recorded a mean of 18.45 a subscale mean of 18 and a percentage of 52.71. Again, the university is more or less average in terms of the extent of interference in the departmental academic process by the university administration; availability of adequate teaching and learning space; adequacy in number of academic and support staff; and availability of departmental library. The fourth factor, students' characteristics, records a mean of 15.04 and a percentage of 50.13. Like the departmental factor, the student factor is average on whether students meet the NUC admission requirements; whether poverty or poor socio-economic background affect students' achievement; whether students are proficient in English; and whether students have appropriate forum to dialogue with their lecturers. Looking closely at the data on the four factors which constitute the variety of academic interactions within the departments and the university, it is clear that the university is below standard in terms of provision of conducive environment for teaching and learning.

### B. The Checklist

The second main instruments employed for data collection is the checklist, This questionnaire, constructed strictly on the basis of NUC guidelines, surveyed the availability and adequacy (quantity and quality) of space, facilities, equipment and materials for teaching and learning in the 21 faculties, The summary of items in this instrument is as follow;

1. Space
  - a. professor's office
  - b. lecturer's office
  - c. administrative office lecture rooms
2. Faculties
  - a. research and science labs
  - b. workshops, reading and seminar rooms
  - c. computer labs, e - learning centre
  - d. teaching-learning resource centre
3. Equipment
  - a. overhead and slide projectors; power point.



- b. projector screen; TV sets; video tape recorder
- c. desk top and lap top computers
- d. photocopier machine; research and science lab equipment
- e. regular and digital cameras; movie cameras

#### 4. Materials

- a. lab chemicals; slides; specimens; tools, etc.
- b. films, film strips; video and audio cassettes; discs
- c. audio-taped and video-taped lessons; maps; globes; games, models, charts, etc.
- d. current textbooks and academic journals

These items in essence constitute a major part of the academic infrastructure for the university and thus critical determinants of the quality of teaching-learning environment. The maximum score on space is 12; facilities, 6; equipment and materials, 18. A total score of 36 points is possible on the instrument, and this varies slightly from faculty to faculty. The data on space and facilities are provided on table No. 8.

In terms of space for all faculties, the mean score is 3.49 out of 12; facilities are scored at 1.21 out of 6; while equipment and materials are scored at 3.62 out of 18 points maximum. In all, the academic infrastructure available for teaching and learning at the university is scored at 23.95 percent. The major weakness of the university as a centre for teaching and research seems to lie in this area. Faculty of Law with a percentage of 43.75 appears to be the best endowed in terms of these resources, while Faculty of Science with 9.76 percent is the least. When this result is juxtaposed with the main one, presented in Table No.6, the picture of the academic environment provided is clearly below the level acceptable for high intellectual attainment among students and staff. The University must rise to this challenge.

#### C. Students Questionnaire

This instrument requires students to score their departments in terms of a number of academically relevant factors stated earlier in the result section. Students' perception of the academic situation is unusually favourable as indicated in table No.10. Indeed, the students as a group seem less sensitive to the problems characterising the teaching-learning environment. The university organization is seen as a place more conducive to meeting their personal goals. This perception may be explained by the fact that quite a number of students see the university education as a status symbol, since only very few applicants actually gained admission into universities. Looking at the data on Table No.10, the College of Medical Sciences ranked the highest (77.5 %) followed by the Faculty of Arts (75.81%) and Faculty of Education (70.18%). The medical students may have seen themselves and their environment as deserving the highest status; hence they have scored their departments fairly high. The Arts and Education students, similarly, may have regarded their admission as a rare opportunity; consequently, this high self-concept translates into favourable conception of their environment. Admission pressure is, of course, fairly high in both faculties. For instance, Faculty of Education has the largest student population of 5032 during 2006/2007 academic session (Ipaye, 2007).

Another possible explanation for students' favourable perception is the entry characteristics of students in general. As reported earlier, majority of staff in the 11 faculties believe that students admitted do not fully meet the NUC requirements. As a result, many students may have seen their admission as an opportunity facilitated by the university administration. Consequently, they would not want to perceive the university in a negative light. Finally, students generally do not have any realistic basis or model for assessing adequacy of teaching-learning space, facilities, equipment and materials. Their perception in this survey is therefore narrowly based on personal interests and needs.

Discussion is not complete without understanding one important finding of this study. Majority of staff (61%) were of the view that most students not proficient in oral and written English language. In spite of the importance of English as a medium of instruction in schools and universities and as the official language in the country, many students consistently perform low in this subject. Many of the written assignments submitted by students in the Department of Education, for instance, are filled with grammatical errors. Poor sentence formation, diction, and punctuation were major problems in most of the final year projects submitted by students in the department. Generally, academic achievement among students is related to competency in the use of English language. The observable low level of achievement among students at the University of Maiduguri may also be partly explained by the fact that most students have difficulty with written English language. Any effort at addressing the problem of low achievement among students must include the problem of proficiency in the use of English language.

## D. Summary of Findings

Based on the main instrument (F1-F4), the major findings of the survey are summarised as follow:

1. Institutional (university and department) contribution to the quality of teaching learning environment is 51 percent.
2. Individual (lecturer and student) contribution to the quality of teaching-learning environment is 53 percent.
3. Lecturers as a group had the highest impact (55 percent) on the quality of the teaching-learning environment.
4. The overall quality of the teaching-learning environment at the University of Maiduguri is 52 percent.
5. Faculty of Law records the best teaching-learning environment (63 percent) while Faculty of Arts (44 percent) ranks the lowest.

The major findings on the academic infrastructure (space, facilities, equipment, and materials) are also summarised as follow:

6. The extent to which the available academic infrastructure supports the teaching-learning activities in the 11 faculties is 24 percent.
7. Adequacy of space (lecture rooms; lecturers' and administrative offices, etc) for teaching learning in the 11 faculties is 29 percent.
8. Adequacy of facilities (research and computer labs; workshops and seminar rooms, etc.) for teaching – learning in the 11 faculties is scored at 19 percent.
9. Adequacy of equipment (overhead and slide projectors; power point; photocopier and laptops, etc.) for teaching and learning in the 11 faculties is 22 percent.
10. Adequacy of materials (lab chemicals, slides, specimens; films, maps, charts, models; video-audio cassettes; current textbooks and journals, etc.) for teaching and learning in the 11 faculties is 24 percent.
11. In terms of academic infrastructure, Faculty of Law also ranks the highest (44 percent) while the lowest score of 10 percent is recorded For the Faculty of Science.

### Students Perception and Other Findings

12. In the 11 faculties students recorded 67 percent favourable perception of the teaching- learning environment. This is in sharp contrast to the lecturers' views and the depressed condition of the academic infrastructure.
13. Sixty percent of the academic staff in the 11 faculties feel that majority of the students admitted into the University of Maiduguri do not meet the NUC admission requirements.
14. Sixty one percent of the academic staff in the 11 faculties were of the views that majority of students are not proficient in oral and written communication in English language.
15. In the Department of Education 90 percent of the lecturers believe that the department is being used as a “dumping ground” for students who are not qualified to be in the University. This view is, however, not shared by the majority of staff in the other departments.

## VII. CONCLUSION AND RECOMMENDATIONS

### A. Conclusion

The main concern in this survey was to determine the institutional and individual characteristics militating against academic performance of students and staff at the University of Maiduguri. The study was guided by a single research question to which it sought to answer: Why do students fail? The findings largely confirmed what other scholars and writers have said about the Nigerian University system (Longe,1991; Ipaye, 2007; Jiboyewa, 2007). The summary of findings above clearly underscores the major academic problems facing the University of Maiduguri. Students were failing because the environment provided for teaching and learning could not lead them to great intellectual attainment. The available academic infrastructure is below average and thus could not support excellence in teaching, research, and learning. Students were failing because majority did not have the required NUC minimum qualification, they lack basic skills in the use English Language and their population is rapidly increasing without corresponding increase in facilities for teaching and learning.

The overall quality of the environment for teaching and learning at the University of Maiduguri based on findings of this survey is sub - mediocre. More disturbing is the fact that awareness of the problem is low within the University academic community. The negative trend is therefore likely to persist without planned

intervention. The challenge before the university management is clearly defined. The problems of course are surmountable if there is a political will and genuine commitment to positive change on the part of the management. It should be added that the deficiencies found in the academic infrastructure and the interactions between students and staff would tend to generate tension in human relations among staff and students; between students and staff in the university community. The implications of the findings are therefore not limited to academic performance of students and staff alone. The social and psychological health of the entire university community is affected negatively when a supportive and conducive environment for teaching and learning is denied to lecturers and students.

## **B. Recommendations**

1. Awareness of problem is the first step to its solution. To increase awareness, the university Management should propagate the findings of this survey to all sectors of the academic community.
2. To address the problem realistically, the University management should be committed to planned intervention. This would involve a team of “social and academic engineers” working systematically in the faculty over a number of years to bring about the required changes.
3. Although not specifically addressed in this study, funding is a basic requirement for producing the desired changes. The level of finding for teaching-learning activities and infrastructure will therefore need to be increase substantially in all the faculties.
4. In the course of this survey, we observed negative attitude to research among staff and a generally low commitment to academic excellence among students. The University Management must promote a culture of academic excellence whereby both staff and students would strive to the highest level of achievement in their various roles and responsibilities.
5. In any organization the quality of input is a crucial factor for the standard and quality of output. The University of Maiduguri should discontinue immediately admission of students into the degree programmes who did not meet the NUC minimum admission requirements.
6. Similarly, quality of staff input into the process of teaching and learning contributes a great deal to the level of students’ achievement. The University Management should ensure that only the best qualified staffs are recruited as lecturers.
7. As a corollary to recommendation No.5, the remedial programmes, currently being operated by the University of Maiduguri, are adequate instruments for addressing the problems of academic deficiencies in the catchment area. However, those students going into the degree programmes through the remedial route should meet the NUC minimum requirements for admission.
8. It has been observed that academic placement of remedial output into degree programmes creates problem for teaching and learning in the departments. For instance, students are sometimes not properly placed into programmes. The departments are also being forced to take students for whom they do not have capacity to teach. The University Management should allow the departments to select their intake from the pool of remedial products.
9. The problem of proficiency in the use of English language at the University of Maiduguri is actually a national problem emanating from the poor academic environment at the secondary and primary school levels. The University of Maiduguri will still need to address this problem. This can be done by instituting within the General Studies and the remedial Programmes remedial English courses compulsory for all students in the university.
10. In addition to funding, this study did not address management as a factor. We recognise the contribution of these factors to the overall outcome in any educational system. As much as possible the Management of the University of Maiduguri should support, fiscally and morally, all efforts and programmes aimed at improving the quality of the teaching-learning environment,
11. Management can make the difference regarding level of students’ achievement and staff motivation. It is management that will make provision for academic infrastructures and propagate appropriate values for academic excellence. We urge the management of the University of Maiduguri to place high priority on the quality of output from the system. This can be done through a variety of intervention measures some of which have been recommended in this report.

## **C. Suggestions for Further Study**

This survey has focused largely on the academic environment within the departments in the 11 faculties of the University of Maiduguri. For an enhanced knowledge and understanding of how environment contributes to performance of students and lecturers, future research may consider the following topics:

1. Administrative policy and students’ academic achievement

2. Management strategies, staff motivation, and students' academic achievement
3. Patterns of funding, staff motivation, and students academic achievement
4. Relationship between students' entry qualification and their academic achievement
5. Conditions of service and productivity among the teaching staff.

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