ENHANCING INSTRUCTIONAL COMPETENCE IN HIGHER EDUCATION:
A Study of Pedagogic Needs in Some African Universities

UNESCO-DAKAR
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ENHANCING INSTRUCTIONAL COMPETENCE IN HIGHER EDUCATION:

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Summary

Given the importance of tertiary level education in national development, it has become necessary to ensure that teaching and learning at that level is efficient and effective. As a first step in ameliorating pedagogy problems in higher institutions, this study investigates the status of support efforts on ground to university teachers in Africa for the enhancement of pedagogy. It attempts to determine the specific needs of lecturers at tertiary level education and makes recommendations for improvement of teaching and learning at that level.

Through the analysis of responses to questionnaires from 28 teachers, each representing a faculty, in 16 universities in 11 Anglophone African countries, the findings of the study revealed that:

i) a few university teachers benefit from induction courses in pedagogy, organized either within the faculties or centrally by the university administration;

ii) many universities have pedagogy support units which assist teachers appreciably in their normal teaching functions, but such assistance is not uniform and does not seem to have much importance attached to it.

iii) many university teachers indicated a need for further assistance in their teaching especially in the area of application of a variety of instructional strategies, media and methods, and the evaluation of instruction, through workshops and training programmes.

Based on the findings, recommendations were made for coordinated efforts in three phases, and 3 levels, for the training of personnel and trainers in tertiary level pedagogy, the establishment and development of teaching (support) units in all tertiary institutions, and the training of tertiary level teachers in pedagogy.
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Introduction

For the developing world higher education is a very important sector of the educational system. The quality and quantity of knowledge that filters down to the lower levels of the educational cone depends on the concentration of these at the tertiary level. The standards of achievement required at, and for, the tertiary levels set the standards of achievement acceptable at the lower levels. Tertiary education is also an ultimate goal for learners at the lower levels. For development and progress a nation depends on the tertiary institutions to set the direction for development, produce the required expert manpower, and develop through research the social, economic, cultural, scientific and technological systems of the society. It is also expected that the future leaders of a country are bred at the tertiary level. Every nation therefore aspires through the provision of appropriate policies and resources, to build the type of higher education that is required for the upliftment of its society.

Human and non-human resources within any school system can be divided into two, the instructional resources and the supportive resources. The instructional subsystem in any school system is the raison d’être of the school. All other resources are to facilitate and assist the teaching-learning process. Teaching and learning at the higher education level involves the development of subject matter expertise by recognized qualified subject matter experts, in other words, the transfer of expertise and expert knowledge from teachers to learners. That the teachers are experts in their fields of learning is usually not in doubt. What is a cause for concern is the efficiency of the instructional system, i.e. how good the teachers are at using the resources available to them in transferring knowledge to the learners, how versed the teachers are in the knowledge of learning processes and learner needs, and the ability of the teachers to assess progress, evaluate and adjust the learning system they are involved in.

While much effort is put into the training of teachers for the lower levels of education, the natural competence of the teacher at the tertiary level is often taken as given. Higher education is very expensive. For the developing countries with very meagre resources, it is important that investments in higher education should be efficiently utilized through ensuring that teachers at that level are given the utmost support through training in pedagogy and the provision of the basic requirements for teaching. This would minimize the unquantifiable wastage that would otherwise occur through inefficiency. Also, given the importance of the skills and knowledge acquired at the higher education level it is necessary to ensure that learners benefit maximally from their experiences and reach the required expertise levels of learning before graduation and the world of work.
The economic crises of third world countries in recent times have resulted in a brain drain from the universities. More experienced, and presumably more competent teachers have abandoned their positions for better paying employment within and outside their home states. Teachers who remain on their teaching positions have found themselves faced with motivation sapping problems like inadequacy of funds and facilities for research and teaching. A higher demand for education has also resulted in larger classes to cope with and an increase in associated student problems.

With these problems in view UNESCO initiated training programmes in pedagogy in higher education (1 988-89 biennium). This was in keeping with the recommendations of the Regional Seminar on the Renovation of Higher Education in Africa (1987). This study, commissioned by UNESCO Dakar, is part of an effort to set a direction for further action on pedagogy in higher education.

The Problem

Any far reaching reforms in the state of pedagogy in higher education should start with an investigation of the status quo across board in African higher institutions. It should not be assumed that the same problems exist everywhere and are of the same order of magnitude or that the solution of such assumed problems are in the same order of priority in all higher institutions. It would be necessary to identify the needs as experienced by the teachers in their pedagogic functions. After which all available resources for teaching should be harnessed to assist the teachers. This should then be followed by programmes that ensure that teachers are able to utilize the resources available more efficiently.

This study is therefore one in a first step at ameliorating pedagogic problems in higher institutions. It takes a look at the university system in Africa with the intention of identifying the support efforts on ground for the enhancement of pedagogy, investigating the specific needs of individual teachers, and making recommendations for the improvement of the situation existing in the universities.

More specifically the study addresses itself to the following questions:

1. Do teachers in the University systems in Anglophone African States have any induction training in pedagogy?
2. What structures exist in the University systems for the support of teachers in their functions in pedagogy?
3. To what extent are these structures effective in enhancing pedagogy in the institutions?
4. What are the prevailing pedagogical needs as perceived by teachers in the university systems in Africa?

Scope of the Study

The UNESCO plan of action for pedagogy in higher education is in 3 parts, one each for Francophone, Anglophone and Lusophone higher institutions in the sub-saharan Africa region. This study is part of the needs assessment for the anglophone universities only. The study investigates the support for pedagogy from the point of view of the teachers.

Definition of Terms

Terms used in this study are defined as follows:

1. Higher Education: Education at the tertiary level of the schools system given normally after completion of secondary school education. This includes universities.
2. Teaching (support) Units: Academic units within institutions which are set aside and equipped to assist teachers in their pedagogic functions.
3. Induction course: A short training programme organized for newly employed personnel to familiarize them with the functions they are expected to perform and teach them the basic skills required for the functions.
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Methodology

The study is a simple survey of the support for pedagogy in anglophone African universities. Sampling was selective to ensure that all countries were included. Easy access and political spread were also considered. This meant that countries with lone universities were included in the sample while countries with many universities just had a few selected. This sampling procedure is considered adequate for the type of information sort. On the whole 27 universities were selected from the 19 anglophone countries (as shown in table 1.) for the study.

Table 1: Distribution of Study Sample and Respondents

<table>
<thead>
<tr>
<th>Country</th>
<th>No. of Universities Selected</th>
<th>No. of Universities which responded</th>
<th>No. of Question Returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Botswana</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. Eritrea</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3. Ethiopia</td>
<td>1</td>
<td>1</td>
<td>**</td>
</tr>
<tr>
<td>4. The Gambia</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. Ghana</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6. Kenya</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>7. Lesotho</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8. Liberia</td>
<td>1</td>
<td>1</td>
<td>1 *</td>
</tr>
<tr>
<td>9. Malawi</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>10. Namibia</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11. Nigeria</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>12. Sierra Leone</td>
<td>1</td>
<td>1</td>
<td>8 *</td>
</tr>
<tr>
<td>13. Somalia</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>14. South Africa</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>15. Swaziland</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>16. Tanzania</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>17. Uganda</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18. Zambia</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>19. Zimbabwe</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Total 27 16 28

(* = Multi-colleges, ** = No. university)
The instrument for the collection of data was a 16-item questionnaire (See Appendix A) which sort information on the following:

- a) The conduct of induction courses for university teachers
- b) The existence of teaching, (support) units in the university systems.
- c) The activities of such units and their effect on teaching in the universities.
- d) The proficiency of teachers in the use of instructional (technological) materials in teaching.
- e) The assistance needed by teachers for enhancing their efficiency in teaching.
- f) Type of training requested by teachers

Copies of the questionnaire were sent by post to the Deans (Heads) of the Faculties of Education in the Universities selected with a request that copies should be distributed to other faculties within the universities. Tables 1-and 2 give information on the distribution of the questionnaires and the responses from the universities. Only one respondent was allowed per faculty of the same university. Twenty-eight questionnaires were received back from the institutions. Table 2 shows the distribution of respondents by discipline.

### Table 2: Distribution of Respondents by Discipline and Experience

<table>
<thead>
<tr>
<th>Discipline</th>
<th>No. of Respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>15</td>
<td>53.6</td>
</tr>
<tr>
<td>Arts and Social Sciences</td>
<td>5</td>
<td>17.9</td>
</tr>
<tr>
<td>Sciences</td>
<td>4</td>
<td>14.3</td>
</tr>
<tr>
<td>Medical Sciences</td>
<td>3</td>
<td>10.7</td>
</tr>
<tr>
<td>Engineering</td>
<td>1</td>
<td>3.5</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Discipline</th>
<th>No. of Respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Academics</td>
<td>16</td>
<td>57.1</td>
</tr>
<tr>
<td>Junior Academics</td>
<td>12</td>
<td>42.9</td>
</tr>
</tbody>
</table>

Data collected through the questionnaire was analysed by simple descriptive statistics; frequency distributions and percentages.
Findings of the study

1. Induction Courses for University Teachers

Of the 28 respondents only 11 teachers indicated that they had an induction course in pedagogy at their university, while 17 respondents had not had any induction courses. The distribution of the responses however showed that while some faculties or colleges had had induction courses for their new teachers, other faculties or colleges within the same universities had not conducted any induction courses or had any such benefits.

Of the 11 respondents who had had induction courses, 7 had attended such courses organized centrally by the universities administration while 4 had had such courses organized within their own faculties. Only six of the 16 universities represented by respondents had the induction courses organized centrally by the administration. (See Table 3)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Relative frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Respondents who had induction courses</td>
<td>39.3</td>
</tr>
<tr>
<td>2. Respondents who had no induction courses</td>
<td>60.7</td>
</tr>
<tr>
<td>3. Universities with centrally organized induction courses</td>
<td>37.5 (of 16 universities)</td>
</tr>
<tr>
<td>4. Respondents who benefitted from centrally organized induction courses</td>
<td>25.0</td>
</tr>
<tr>
<td>5. Respondents who benefitted from own faculty organized induction courses</td>
<td>14.1</td>
</tr>
</tbody>
</table>

2. The Status of Pedagogy Support Units

Twelve of the 16 universities which responded have established units or structures for the support of pedagogy in the institutions, while 8 of the institutions have such units located within departments or faculties in the universities, 4 institutions have centrally located teaching (support) units while 2 universities have both faculty based and centrally located units.

<table>
<thead>
<tr>
<th>Category</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Universities with teaching support units</td>
<td>12</td>
<td>75</td>
</tr>
<tr>
<td>2. Universities without support units</td>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td>3. Support Units located within Faculties or Departments</td>
<td>8</td>
<td>50</td>
</tr>
<tr>
<td>4. Support units located centrally in University</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>5. Support Units located both centrally and in Faculties</td>
<td>2</td>
<td>12.5</td>
</tr>
</tbody>
</table>
The Teaching (support) units in the responding universities are variously designated as listed below:

a) Department of Medical Education
b) Audio Visual Centre/Unit
c) Language Laboratory
d) Department of Educational Technology
e) University Teaching and Learning Improvement Unit
f) Educational Media Centre
g) Educational Technology and Communication Centre
h) Centre for Faculty Professional Development
i) Instructional support Services
j) Educational Services Centre
k) Staff training and Development Office.

As earlier implied the 28 respondents in the study represent 28 different academic faculties in all the 16 universities represented. Of these 17 respondents indicated awareness of the existence of a teaching (support) unit in their universities or faculties. The pattern of responses suggest that within the same universities some teachers may be aware of the existence of such units while others are unaware, this especially in cases where such units are located in faculties and not centrally.

3. **Functions and Effects of the Pedagogy Support Units**

Table 5 gives an analysis of the functions of the teaching support units as indicated by the respondents.

<table>
<thead>
<tr>
<th>Functions</th>
<th>Frequency %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Seminars / Workshops/ courses for lecturers</td>
<td>76.5</td>
</tr>
<tr>
<td>2. Storage and supply of teaching equipment to lecturers</td>
<td>58.9</td>
</tr>
<tr>
<td>(e.g. projectors etc).</td>
<td></td>
</tr>
<tr>
<td>3. Consultancy Services to Dept./Faculties</td>
<td>58.9</td>
</tr>
<tr>
<td>(e.g. Media coverage of events)</td>
<td></td>
</tr>
<tr>
<td>4. Assistance to lecturers on the preparation of teaching materials (e.g. photographic slides)</td>
<td>52.9</td>
</tr>
<tr>
<td>5. Induction courses for new lecturers</td>
<td>41.2</td>
</tr>
<tr>
<td>6. Supply of required media for teaching (e.g. video films)</td>
<td>35.3</td>
</tr>
<tr>
<td>7. Provision of reference materials for students (e.g. through a media library)</td>
<td>29.4</td>
</tr>
</tbody>
</table>
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Table 6 shows the responses on how much effect the teaching support units have on the teaching functions of the respondents. While such units had appreciable effect on the methods and materials (media) use by teachers, the effect on class/learner management, evaluation and the preparation of lectures was much less. In any case the presence or activities of a teaching (support) unit had some overall effect on the teaching functions of the lecturers.

Table 6: Effects of the Teaching (support) Unit on Teaching functions of Respondents (Frequency of response)

<table>
<thead>
<tr>
<th>Functions</th>
<th>Much effect</th>
<th>Little effect</th>
<th>No Effect</th>
<th>Order of relative* effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation of Lectures/Instruction</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>4th</td>
</tr>
<tr>
<td>Varying of Teaching Methods</td>
<td>11</td>
<td>3</td>
<td>2</td>
<td>2nd</td>
</tr>
<tr>
<td>Use of Instructional materials</td>
<td>9</td>
<td>4</td>
<td>1</td>
<td>1st</td>
</tr>
<tr>
<td>Management of Learners</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>5th</td>
</tr>
<tr>
<td>Evaluation of Learning</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>3rd</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>36</strong></td>
<td><strong>23</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

(*By weighting)

Needs Expressed by Respondents

Item 12 on the questionnaire requested the lecturers to state which instructional media they are able to use with confidence in teaching. A total of 9 Audio-Visual aids were mentioned by all respondents. The frequency of the indication of each is shown on Table 7 below. The media referred to are overhead projector, video, 16 mm film projector, television, slides, film strips, opaque projector, flip charts and audio media.

Table 7: Indication of Proficiency in Use of Instructional Media by Respondents

<table>
<thead>
<tr>
<th>Media</th>
<th>Frequency of Indication</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overhead projector</td>
<td>23</td>
<td>82.1</td>
</tr>
<tr>
<td>Photographic slides</td>
<td>12</td>
<td>42.9</td>
</tr>
<tr>
<td>Video tape</td>
<td>10</td>
<td>35.7</td>
</tr>
<tr>
<td>Television</td>
<td>6</td>
<td>21.4</td>
</tr>
<tr>
<td>16 mm films</td>
<td>5</td>
<td>17.9</td>
</tr>
<tr>
<td>Flip charts</td>
<td>5</td>
<td>17.9</td>
</tr>
<tr>
<td>Audio media</td>
<td>5</td>
<td>17.9</td>
</tr>
<tr>
<td>Film strips</td>
<td>3</td>
<td>10.7</td>
</tr>
<tr>
<td>Opaque projector</td>
<td>2</td>
<td>7.1</td>
</tr>
</tbody>
</table>
**Enhancing Instructional Competence in Higher Education**

The only media that most of the respondents can use with confidence is the overhead projector. Only a few can use the rest with confidence. It should be noted that none of the newer technologies of information has been listed.

Respondents were asked to indicate the instructional function for which they need the most assistance from a Teaching (support) Unit (item 13 on questionnaire). Responses given to this item have been classified in Table 8 and their frequency of occurrence shown.

<table>
<thead>
<tr>
<th>Activity / Function</th>
<th>No. of Respondents</th>
<th>% of Total Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Materials Development</td>
<td>17</td>
<td>60.7</td>
</tr>
<tr>
<td>Instructional Media Utilization</td>
<td>11</td>
<td>39.3</td>
</tr>
<tr>
<td>instructional Strategies (methods etc.)</td>
<td>10</td>
<td>35.7</td>
</tr>
<tr>
<td>Evaluation of Instruction</td>
<td>7</td>
<td>25.00</td>
</tr>
<tr>
<td>Course design and development</td>
<td>4</td>
<td>14.29</td>
</tr>
<tr>
<td>Provision of Reference materials</td>
<td>4</td>
<td>14.29</td>
</tr>
<tr>
<td>Classroom/Learner management</td>
<td>3</td>
<td>10.71</td>
</tr>
<tr>
<td>Computer Assisted Instruction and New Technologies of Teaching</td>
<td>3</td>
<td>10.71</td>
</tr>
<tr>
<td>Maintenance of Equipment</td>
<td>1</td>
<td>3.6</td>
</tr>
<tr>
<td>Research work</td>
<td>1</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Assistance needed by lecturers, from teaching units, as indicated by their responses, bother mainly on the development and use of instructional media, the adequate utilization of instructional media, and the employment of adequate instructional strategies in teaching. These are followed, in order of desire by respondents by evaluation techniques, course design and development, the need for reference materials, learner and class management, new technologies of instruction, maintenance of equipment and research conduct.

However Table 9 shows a slightly different order of priorities of request for training, in response to item 15 on the questionnaire.
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Table 9: Training Programme Preferences of Respondents for Enhancing their Competence in Teaching

<table>
<thead>
<tr>
<th>Training Required</th>
<th>No. of Respondents</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Strategies</td>
<td>13</td>
<td>46.4</td>
</tr>
<tr>
<td>Evaluation techniques</td>
<td>6</td>
<td>21.4</td>
</tr>
<tr>
<td>Instructional Materials Development</td>
<td>6</td>
<td>21.4</td>
</tr>
<tr>
<td>Use of instructional Materials</td>
<td>6</td>
<td>21.4</td>
</tr>
<tr>
<td>Course design and development</td>
<td>4</td>
<td>14.3</td>
</tr>
<tr>
<td>New Technologies of Instruction</td>
<td>3</td>
<td>10.7</td>
</tr>
<tr>
<td>Class/Learner management</td>
<td>2</td>
<td>7.14</td>
</tr>
</tbody>
</table>

Discussion of findings

1. Induction Courses for Tertiary Education Teachers

Results from this study show that some of the universities sampled provide induction courses in pedagogy for incoming staff. The pattern of response however indicated that this practice is not as well spread as it should be and that in some cases, where these courses exist, all staff do not benefit from it. This would indicate that the importance of such training in pedagogical skills has not yet been widely acknowledged in African (anglophone) universities.

It is therefore necessary for a mechanism to be set in motion for spreading the awareness of the need to provide pedagogical training for teachers in higher educational institutions. The reasons for this are obvious. The fact that so much emphasis is placed on the training of teachers for other levels of education is an admission that teaching is a specialized skill. Most teachers at tertiary education level have had no previous training for the acquisition of such skills. The conditions of teaching at the tertiary level are also quite different from those at lower levels and require skills and techniques which the teachers may not have encountered at lower levels of learning. Also the new information and communication technologies now offer totally new dimensions and approaches for information packaging and communication in teaching and the tertiary education system should be able to take full advantage of this, more so as it is preparing learners for a technologically dependent future.

The other question about such induction courses is who should take responsibility for them. Findings here show that in some universities the induction courses are handled centrally by the administration while in others it is organized within the faculties. Organizing induction courses within Faculties is not likely to ensure that all staff benefit equally from it. This is so in view of the apathy with which teaching as an occupation is treated. Most lecturers at the tertiary level do not consider themselves <<teachers>> and may in fact avoid any activities that categorize them as such if the activity is organized outside their own faculties. Such induction programmes should be publicised as centrally organized and compulsory for all staff, even if it is based in a particular competent academic unit.
Enhancing Instructional Competence in Higher Education

Given the diversity of methods and techniques required for instruction in different disciplines in the universities, is it possible to have a single induction course which would cover all the requirement of teaching in all disciplines? Such a course would have to be quite long and contain material that is not required by all the teachers involved. That type of induction course would be wasteful in terms of time and resources. An induction course for all staff should just include what should be general knowledge and skills required for teaching and other functions of the teacher within the tertiary education system. Skills required for teaching in specific disciplines could then be acquired through a series of development programmes. This implies that staff development for the acquisition of pedagogic skills should not be a once-off affair but a continuous programme. Each unit of the institution can therefore organize training programmes for its own staff development as dictated by its special needs. It is also expected that there are skills that staff could develop from experience on-the-job if the adequate facilities are provided and used. Academic staff should therefore be taught and encouraged to make use of all available resources and opportunities at their disposal.

2. Structures for Support and Development of Pedagogy

The findings of this study show that seventy-five per cent of universities sampled have units within the university system which provide some pedagogical support to academic staff. These units are mostly located within the academic faculties and not centrally. Functions identified for the units include seminars, workshops and courses for teachers, storage and supply of teaching equipment to teachers, consultancy services and the assistance to lecturers on the preparation of teaching materials, as the most popular functions. Less popular but nevertheless existing functions are; induction courses for new lecturers, supply of required media for teaching and provision of reference materials for students.

This situation is commendable and should be popularized further so that all academic staff in universities could benefit from such tactilities and programmes.

The units as they exist currently in the universities are labelled differently by descriptive titles. The most comprehensible titles for all concerned are «Instructional Support Services», «Educational Service. Center» and «University Teaching and Learning Improvement Unit». The designation of a center is improvant to avoid confusion about its intentions. Whatever the designation however, the functions should include all the functions listed above and no function should be more important than the others. Such a centre in an institution should have some means of educating faculty on its functions and facilities. That could be achieved through the preparation and the distribution of brochures.

«Teaching and learning Improvement Centre» is a name that adequately describes the desirable functions of a teaching (support) unit. Through workshops, seminars and short courses the centre should identify particular needs of teachers and learners and provide programmes that improve the instructional ability of academic staff. The centre should provide consultancy services to individual teachers or faculties on the development of learning programmes, preparation for teaching and identification of conditions that enhance teaching and learning effectiveness, for all specific purposes. The centre should provide consultancy services to individual teachers or faculties on the development of learning programmes, preparation for teaching and identification of conditions that enhance teaching and learning effectiveness, for all specific purposes. The centre should provide consultancy services to individual teachers or faculties on the development of learning programmes, preparation for teaching and identification of conditions that enhance teaching and learning effectiveness, for all specific purposes. The centre should be equipped to assist lecturers in the preparation of simple instructional materials and the acquisition of materials that cannot be easily prepared locally. The acquisition, storage and supply of pedagogic equipment to faculties could also be undertaken by the Centre. The advantage of this is that individual departments would not need to acquire equipment that are only occasionally used, and thereby save a lot of funds. To function properly, optimally, the centre would need specialized personnel who are trained as trainers or who by their specialization are properly academically equipped to handle all the above-mentioned functions. In fact the development of pedagogy in higher education should start with the development of such personnel and units.
3. **Effects of Teaching (Support) Units on Pedagogy**

Analysis of responses on the effect of the existing teaching (support) units on the instructional functions of teachers in the universities (Table 6) showed that the units had appreciable effect on the lecturers capabilities, and functions. This also is testimony to the need for a properly functional teaching (support) unit in all universities.

The most effects as indicated by the respondents are on their use of instructional materials and the varying of teaching methods. These two are aspects of the employment of suitable instructional strategies. The magnitude of other effects were in the order: evaluation of learning, preparation of lecture/instruction and the management of learners. These last three effects need to be strengthened as they are also very important. Teachers at the higher education level need to learn how to plan their own teaching programmes and manage any classroom situations that may result. They should also be able to effectively evaluate their teaching so that they could identify lapses that need to be taken care of. These would lead definitely to improvement of teaching competence. The inability to plan instruction adequately is probably responsible for the predominance of the much abused lecture method of teaching. It is usually assumed that because students at tertiary institutions are mature then the lecture method is adequate in all situations. The lecture method is usually the barest minimum effort in teaching and definitely not the best for most situations.

With the changing conditions in class groups, mainly younger learners and larger classes, classroom and learner management techniques required have also changed. Instructional technology has introduced newer methods of handling learning groups and learning activities. Teachers at higher educational levels need to be made aware of these. There are also a large variety of techniques and methods available for effective evaluation of instruction. Teachers need to be appropriately trained in their application.

4. **Perceived Pedagogical Needs of Teachers in Universities**

Teaching without instructional media can best be compared with farming with the bare hands and for this era, employing only the chalkboard in teaching is like farming with the traditional hoe only. As in farming, high productivity in all facets of human endeavour today depends on the level of application of scientific and technological aids and methods. Resistance to technological change in pedagogy is no longer tenable. Teachers have been known to be the most conservative in the adoption of technology for work. It is therefore gratifying to note that in the 16 African universities sampled some teachers can commend their own use of 9 different types of the “older” technological aids to teaching. The single media that a majority of the teachers use confidently is the overhead projector. The overhead projector (OH) is one of the most versatile (in use) of the teaching aids. It is also one of the most easily available teaching aids. It would be interesting to find out if the teachers in universities are able to employ the OH in all of its formats of use or just as another display board in place of a chalkboard. The list of media used (in table 7) could also represent the more readily available media to teachers. This could imply that the use of media in teaching could be partly limited by their availability. However noting that “old habits die hard” it could be advisable that new entrants into the teaching profession should be encouraged as much as possible to use all available media in their instruction. This could be done through induction courses and through making such media readily available.

Instructional media involve hardware and software. Systems that expect teachers to prepare most of the software they use may not be very effective. Commercially prepared software (films, video tapes, sound recordings, slides, pictures, computer programmes etc.) should be provided as much as possible. Apart from being of better quality because of their professional preparation, lecturers would be saved a lot of valuable time.
Special techniques are needed for the preparation of most software. It is not surprising therefore that most of the respondents indicated a need for assistance from the teaching support units in the development of instructional materials. Next on the list of assistance needed are the use of media for instruction and the instructional strategies to employ in teaching (Table 8). Media should not be employed in teaching just for its own sake, but as a means of adding new dimensions to what can be done to facilitate learning. They are the means through which teachers communicate their ideas more clearly to learners. They are an integral part of the instructional strategy employed. Table 8 shows that the respondents in this study are quite aware of the need for the use of media in teaching.

The need for assistance in the design and development of courses and the evaluation of teaching is also indicated by a few respondents. This may be because lecturers are not normally involved in the design of the courses they teach. They may not also be aware of the possibilities in the design of instruction, its implementation and evaluation. A lack of awareness could also be involved in the low demand for assistance in the use of new technologies of instruction and the computer. The chances are that lecturers do not have much access to these, and may not be fully conscious of their pedagogical uses and advantages.

As would be expected, the training programmes solicited by the respondents reflect their pedagogical preoccupations in order of priority (Table 9). Instructional strategies in a narrow sense would refer to methods of teaching but broadly used would include all the other items listed on the table, viz: evaluation techniques, instructional materials development and use, course design and development, newer technologies of instruction, and class and learner management. It is therefore right that training programmes organized for improving pedagogic skills should attend to all these factors.

### Conclusions and recommendations

#### 1. Conclusions

Findings of this study show the following:

a) Some universities in anglophone Africa, South of the Sahara, provide induction courses for new teachers to acquaint them with the pedagogic skills required. However this practice needs to be popularized and further developed as an essential feature of academic practice in higher institutions. Induction courses for university teachers as they are currently given do not reflect much central planning and management. The complaint in many instances is that the institutions do not seem to recognize the importance of such programmes.

b) Most institutions in the study sample have units which are responsible for assisting teachers in the execution of their instructional activities, so the idea can be said to be common. These units however do not serve the whole university in most cases. There is still a need to establish such units in all universities and expand their resources and programmes so that they would be capable of serving the pedagogic needs of the whole university.

c) Where teaching support units are present they have been found to be quite effective in enhancing the ability of the teachers served. This effectiveness is appreciable on functions like the use of a variety of instructional materials and methods. There is however a need to strengthen these units further and include other aspects like introduction of staff to the new technologies of learning and assistance in course development, implementation and evaluation.
d) As expressed by the respondents in the sample assistance from teaching support units to lectures should focus more on the assistance in the development and use of instructional materials and methods. Teachers need to be aware of all the advantages of the use of media (old and new) in instruction and should be encouraged to shift from conservative lecture methods of instruction to more modern and more effective methods. Training programmes for teachers in higher institutions should be based on all the above-mentioned factors.

2. Recommendations

Africa’s future depends on the quality of the output of its higher education efforts. The professionals and experts trained in the higher institutions in Africa can only reflect the quality of the systems that produced them. It is therefore very important that the instructional systems within the tertiary level institutions should be modernized and improved. This can best be achieved through adequate support, in terms of resources and programmes for the teachers in their teaching functions. Such resources and programmes aimed at improving the instructional sub-system require properly equipped and specialized academic units within the institutions.

It is therefore recommended that all universities should take steps to establish and develop special units which have the function of assisting teachers/lecturers in their pedagogic functions. The objectives of such units should include the following:

- Assisting teachers in the development of new programmes of teaching.
- Assisting teachers with the techniques of evaluation, and improving the evaluation procedures currently in use.
- Creating awareness on effective approaches to instructional management.

To perform these functions properly the pedagogy support units would need to be optimally equipped with the right calibre of human and non-human resources. This calls for internationally coordinated efforts and cooperation. Figure 1 gives an outline of the recommended line of action in achieving efficient teaching systems through the development of strong Pedagogy Support Units in tertiary institutions.
Personnel Development Activities

Phase I
Regional level

- Training of Trainers through Regional Workshops, Courses, etc.

Phase II
Sub regional level

- Development of Training and Support Programmes in Pedagogy for Teachers through workshops etc.

Phase III
Universities Level

- Institutional Training in Pedagogy for Teachers
- Assistance to teachers in the teaching functions

Building of Infrastructure or Capacities

- Training of Resource Persons for Units through Post Graduate degrees and other professional courses

- Establishment and Development of Teaching support Units in all higher institutions

- Reinforcement of Teaching Units with Equipment and other Resources, and a consolidation of programmes

Fig. 1: Recommended Lines of Action for the Enhancement of Pedagogic Ability of...
Phase 1 requires action at a regional level, with international assistance, on the training of required personnel at expert level to man the pedagogy units and the training of trainers.

Phase II involves the establishment and development of pedagogy units in all universities and the development of training packages and programmes, at sub-regional levels. This would involve universities working together through workshops and assisted by international organisations and experts.

Phase III is at institutional levels. It is the actual implementation of planned programmes and packages. This could require external financial assistance especially in the equipping of the teaching units.

After the initial take off, all the three phases listed above could then go simultaneously since there would always be a need for revision and renewal of the programmes. Also all the institutions do not have to be operating at the same level at the same time since this study shows that some institutions are already well into Phase III. It must be stressed that the strategies of training at any level should reflect or exemplify the quality of teaching that is to be achieved in the higher institutions.

It can be hoped that the synchronization of efforts as suggested here at all levels would over time yield the desired quality of pedagogy in tertiary institutions in Africa.

Bibliography

8. UNESCO Regional Office for Education in Asia and Oceanic (1980) ; New Techniques for Preparing Educational Personnel. APEID Bangkok.
This questionnaire is intended to collect information on the existing situation in the institutions as baseline information of activities for 1996. It would therefore be appreciated if the questionnaire is filled out and returned to UNESCO Dakar preferably before the 30th April 1996.

Dear Colleague,

The Higher Education Unit of UNESCO DAKAR is planning activities for the development of “teaching units” in tertiary institutions and enhancing the efficiency of teaching and learning in Higher Education in Africa.

Reference: Teaching (support) units in Tertiary Institutions in Africa

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<th>1. Name of Institution</th>
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<th>3. Phone</th>
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<th>4. Title/ Position of Respondent</th>
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<th>5. Department and Faculty of Respondent</th>
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<tr>
<th>6. Are there any induction courses in teaching for new lecturers in your institution</th>
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<td>Yes</td>
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<tr>
<th>7. What unit is responsible for such induction courses for teaching staff?</th>
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<th>8. Do you have a teaching support unit for lecturer in your institution?</th>
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<tr>
<th>9. What is the designation (name) and location of such a unit?</th>
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<td>Yes</td>
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Reference: Teaching (support) units in Tertiary Institutions in Africa
### Designation of unit

- Educational media center / unit
- Educational communication center
- Instructional media Library
- Instructional Technology Center
- Other Names

(i) 
(ii) 
(iii)

### 10. What are the functions of the unit(s) above, in your institution?

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<thead>
<tr>
<th>Function</th>
<th>Yes</th>
<th>No</th>
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<tr>
<td>- Induction courses for new Lecturers in teaching</td>
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<td>- Seminars / workshops/ courses</td>
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<td>for lecturers on:</td>
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<td>- Preparation for teaching</td>
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<td>- Delivery of lectures</td>
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<tr>
<td>- Preparation and use of teaching materials</td>
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<tr>
<td>- Assistance to lecturers on the preparation of teaching materials (e.g. photographic slides)</td>
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<td>- Supply of required media for teaching (e.g. video films)</td>
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<td>- Storage and supply of teaching equipment to lecturers (e.g. film projectors)</td>
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<tr>
<td>- Consultancy services to the Department/faculty (e.g. media coverage of events)</td>
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<td>- Provision of reference materials for your students (e.g. through a media library)</td>
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</table>
11. How much effect does the teaching unit have on your functions as a lecturer?

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<thead>
<tr>
<th>Function</th>
<th>much</th>
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<tbody>
<tr>
<td>Preparation of lecture/instruction</td>
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<td>Varying your teaching methods</td>
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<tr>
<td>Use of instructional materials in teaching</td>
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<td>Control of your students during class periods</td>
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<td>Evaluation of your students</td>
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12. Which instructional media can you confidently use for your teaching (apart from the chalkboard)?

(i) 
(ii) 
(iii) 

13. For which instructional/teaching functions do you need the most assistance from a teaching (support) unit?

(i) 
(ii) 
(iii) 
(iv) 

14. Please give any other information that could be of use UNESCO Dakar

15. What type of activity/training/workshop would you want to be involved in to enhance your competence as a teacher at the tertiary level.

16. Name of Respondent (optional)