WIDENING ACCESS TO QUALITY HIGHER EDUCATION IN DEVELOPING COUNTRIES THROUGH DISTANCE EDUCATION: THE SUCCESS STORY OF THE UNIVERSITY OF CAPE COAST, GHANA

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Summary
Making quality higher education widely available is increasingly seen as one of the keys to national development. However, many developing countries face challenges in providing and expanding tertiary institutions to meet the ever-increasing demand for higher education. Using distance education (DE) as a cost-effective institutional arrangement for widening access to higher education has attained worldwide acclamation.

The case of the University of Cape Coast, UCC, Ghana – where the minimum human, physical and financial resources have been used to widen access to higher education through a dual mode system – is an experience worth sharing with the whole world. With a judicious combination of resources in the three areas above, within eight years the UCC leadership has raised the overall enrolment in the University from 17,000 to 42,000 students, with DE accounting for 25,000 students.

The challenges faced in mounting DE programmes have been substantially overcome. Indeed the University has now got enough funds to construct its own premises equipped with modern technology in the ten regional capitals, thus diversifying its delivery mode, starting in August 2009.

Introduction
Using Distance Education (DE) as a cost-effective institutional arrangement for widening access to higher education has attained worldwide acclamation. Both developed and developing countries have adopted this approach with varying degrees of success. However, while most developed countries and a few developing countries have been very successful in establishing cost-effective DE programmes and are reaping tremendous benefits, a few developed and most developing countries are yet to derive any benefits from this enterprise. The primary purpose of this paper is to share the strategies adopted by the University of Cape Coast, Ghana, in mounting and monitoring cost-effective and quality DE programmes using a minimum of human, physical and financial resources.

Specifically, this paper:
The University of Cape Coast Before DE Programmes

The University of Cape Coast was established by an Act of Parliament in 1962 as a University College of Education and mandated to produce graduate teachers for the 2nd Cycle Schools and Teacher Training Colleges in the country. With an initial admission of 155 students to the Faculty of Education, the University has grown steadily over the years. Before the commencement of DE programmes in 2001, the University had three Faculties – Education, Social Science and Arts – and four Schools – Agriculture, Physical Science, Biological Science and Business; and it had 54 programmes with a student population of about 15,000.

Data on Enrolment

Enrolment has grown over the years with only very limited expansion in physical facilities such as lecture theatres, and science and computer laboratories. The available statistics show that from the time DE commenced in UCC in 2001 to the present, more than 60% of the qualified applicants could not be admitted due to the limited infrastructure. Table (1) below depicts this trend in the University.

Table 1  Comparative analysis of admissions to the University before DE

<table>
<thead>
<tr>
<th>Year</th>
<th>Gender</th>
<th>Female</th>
<th>Total</th>
<th>Gender</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001/2002</td>
<td>Male</td>
<td>6,432</td>
<td>2,147</td>
<td>8,579</td>
<td>2,680</td>
<td>904</td>
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<td>2002/2003</td>
<td>6,645</td>
<td>2,933</td>
<td>9,578</td>
<td>2,920</td>
<td>963</td>
<td>3883</td>
</tr>
<tr>
<td>2003/2004</td>
<td>9,148</td>
<td>4,295</td>
<td>13,443</td>
<td>2,710</td>
<td>1,181</td>
<td>3891</td>
</tr>
<tr>
<td>2004/2005</td>
<td>9117</td>
<td>4122</td>
<td>13,239</td>
<td>3,009</td>
<td>1,221</td>
<td>4230</td>
</tr>
<tr>
<td>2005/2006</td>
<td>8,177</td>
<td>4,109</td>
<td>12,226</td>
<td>3,184</td>
<td>1,501</td>
<td>4685</td>
</tr>
<tr>
<td>2006/2007</td>
<td>9,543</td>
<td>3,590</td>
<td>13,133</td>
<td>2,604</td>
<td>1,151</td>
<td>3755</td>
</tr>
<tr>
<td>2007/2008</td>
<td>7,823</td>
<td>3,041</td>
<td>10,864</td>
<td>2801</td>
<td>1,066</td>
<td>3867</td>
</tr>
<tr>
<td>2008/2009</td>
<td>6,599</td>
<td>3,177</td>
<td>9,776</td>
<td>2738</td>
<td>1,118</td>
<td>3856</td>
</tr>
<tr>
<td>Total</td>
<td>52,431</td>
<td>25,165</td>
<td>77,596</td>
<td>19,966</td>
<td>8,201</td>
<td>28,167</td>
</tr>
</tbody>
</table>
The University of Cape Coast After DE

The University offered its first DE programme in Basic Education in 2001. About 721 students, who qualified for admission using the established standards in the University, were admitted to pursue the three-year Diploma in Basic Education programme. A comparative analysis of the enrolment on the campus-based and DE programmes from 2001 to 2008, as shown in Table 2, indicates an increasing trend with DE admitting more students than the regular system from 2004 till the present. This trend is explained by the fact that two additional diploma programmes in Commerce and Management Studies were introduced.

Table 2  Comparative analysis of admissions to campus-based and distance programmes from 2001–08

<table>
<thead>
<tr>
<th>Year</th>
<th>Qualified applicants admitted (mainstream)</th>
<th>Qualified applicants admitted (distance education programme)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gender</td>
<td>Gender</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>2001/2002</td>
<td>2680</td>
<td>904</td>
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<tr>
<td>2002/2003</td>
<td>2,920</td>
<td>963</td>
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<tr>
<td>2003/2004</td>
<td>2,710</td>
<td>1,181</td>
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<td>2004/2005</td>
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<tr>
<td>2005/2006</td>
<td>3,184</td>
<td>1,501</td>
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<tr>
<td>2006/2007</td>
<td>2,604</td>
<td>1,151</td>
</tr>
<tr>
<td>2007/2008</td>
<td>2,801</td>
<td>1,066</td>
</tr>
<tr>
<td>2008/2009</td>
<td>2,738</td>
<td>1,118</td>
</tr>
<tr>
<td>Total</td>
<td>19,966</td>
<td>8,201</td>
</tr>
</tbody>
</table>

One significant inference from the above data is that by introducing the dual mode, the University had more than doubled its annual student intake. Also, it is worth noting that whereas the regular system has 54 programmes, there are only three DE programmes, which shows clearly how access to higher education can be widened through DE. Equally significant is the fact that the total enrolment of student on campus-based programmes, including those at post-graduate level, in the 2008–09 academic year stood at a little over 17,000 compared to over 25,000 students on the three DE programmes.

Key Features of Distance Education Programmes

What factors accounted for this tremendous increase in student enrolment in the University of Cape Coast? How did the University apply these factors to achieve this outcome? What impediments or challenges were encountered on the way and how were these problems solved to bring about this significant change in enrolment? The answers to these questions will undoubtedly lead to strategies for mounting further DE programmes using limited human and material resources.

It is appropriate to begin by defining and outlining the key characteristics of the concept of ‘distance education’ and its philosophical and theoretical underpinnings which became guidelines for mounting DE programmes in the University.

Two of the 29 definitions on the Web became the cornerstone of UCC’s DE programme initiative, viz.
an education program whereby students may complete all or part of an educational in a geographical location apart from the institution hosting the program; the final award given is equivalent in standard and content to an award program completed on campus.

the education that takes place when a teacher and a students are separated by physical distance, and technology (i.e. audio, video, text, print) often in concert with face-to-face communication is used to bridge the instructional gap.


The core features in these two definitions [which contain all the key elements in the classic definition provided by Keegan (1986)] that became the guiding principles in the design, implementation and management of UCC’s DE programmes are that:

1. the teacher and students are separated physically or geographically;
2. the instructional gap between the teacher and the students is bridged by means of technology, including print;
3. the final award given is equivalent in standard and content to an award in a campus-based programme.

The philosophy which emerged from the above characteristics is that individuals can obtain certificates, diplomas and degrees that are equivalent to those awarded through campus-based programmes by studying outside the traditional face-to-face using any form of technology, including print.

Starting from this premise, there were three essential prerequisites for UCC’s introduction of DE:

1. Leadership with a sound knowledge base in DE and institutional backing to plan, design, implement and manage the programme.
2. Highly motivated academic staff to produce the learning materials and supervise the entire programme to ensure quality and parity of esteem between DE and campus-based programmes.
3. Limited funding to undertake the necessary preparatory activities.

Steps Followed to Mount the Dual Mode System in UCC

The University leadership took advantage of a directive that raised the minimum qualification of teachers in the basic school from Teachers’ Certificate A to Teachers’ Diploma to mount its first DE programme – a Diploma in Basic Education – for this category of teachers. This target clientele, which numbered over 150,000 teachers, could not be admitted to the campus-based programme and had to resort to DE as a viable option to obtain the diploma. The University only had to repackage the existing curriculum of the campus-based degree programme in Basic Education into a three-year Diploma and a two-year Post-diploma degree programme for the DE system. As an alternative mode, the repackaged programme covered almost all the features of the campus-based courses in detail – the credit weighing of courses, content coverage, examinations and approval of results at departmental and faculty levels – to ensure parity.

The next stage was the writing of the modules and other learning materials. The relevant academic staff who teach the courses on campus were identified and the committed ones were recruited for training to write the modules using the designed housestyle. The institutional design through which the modules were produced for the DE programmes was based on Ausubel’s meaningful verbal learning theory which postulates that the task of the teacher is to present the learning material in ways that encourage learners to ‘make sense’ of
it by relating it to what they already know and not just to memorize it in a rote fashion (Ausubel, 1963)

The writers were trained on how to repackage the course content into its final form using a six-stage design, viz.

1. Provide an introduction or advance organizers that include general principles, outlines or questions that establish the desired learning set in the students.
2. State desirable learning objectives and alert the students to new or key concepts.
3. Present new material in small steps organized logically and sequenced in ways that are easy to follow.
4. Elicit students’ responses regularly using in-text questions to ensure that each step is mastered before moving to the next.
5. Finish with a review of the main points or a summary.
6. End with a follow-up of the presentation with self-assessment questions or assignments.

A special incentive package that was aimed at motivating the writers to deliver quality modules was offered and was approved by the university authorities, viz.

1. A payment of US$1,350 for writing a three-credit course of 36 lectures or lessons. This was three times higher than the rate approved for the initial writing of three-credit courses (US$450.00)
2. Modules produced counting as publications for promotion purposes
3. Writers to share ownership of the material produced with the University, receiving annual royalties in respect of books produced and sold to students.

With a team of highly motivated writers in place, the University leadership used about US $10,000 as seed money to pay one-third of the fees for writers and set up an office of two secretarial staff to work on the modules. The first year (2000) was devoted to writing the eight first-year modules and study materials required for Year One of the three-year Diploma programme.

The following key activities were undertaken as the writing and editing of the modules progressed:

1. Study Centres in the regional capitals were established at the polytechnic institutions for fortnightly face-to-face sessions.
2. Advertisements for applicants for the programme were put in popular daily newspapers.
3. Teaching Assistants with a good first and/or second degree were recruited from the regions and trained to hold tutorials for students.
4. The application forms were processed to determine how many copies of the learning materials had to be printed for the first semester courses only.
5. Lecturers who wrote the modules and were teaching the course to students on the regular programme were appointed as chief examiners for the DE courses.
6. Admission letters were sent to the qualified applicants to pay fees that covered materials and tuition and asking them to report on a specified date to register and pick up the study materials at their respective Study Centres.

In 2001, the Vice Chancellor of the university launched the DE programme formally with 721 students admitted to pursue the three-year diploma in Basic Education.
The money from the sale of application forms and fees paid by students on the programme were used to repeat the foregoing processes by producing the second-year modules and admitting the second batch of students to the programme.

Using the same procedures, the curricula for two business programmes in Commerce and Management Studies were repackaged, with the modules written and the two programmes mounted in 2004. Thus, within a short period of eight years, the enrolment on DE programmes has outstripped that of the campus-based programmes. The widening of access to higher education by the DE mode has also extended and strengthened the financial base of the University.

A special mention should be made here of the establishment of monitoring teams by the University leadership using the staff of the Centre and some of the Chief Examiners. These teams went to the Study Centres on a weekly basis to solve personal study problems of students and conduct quizzes for their continuous assessment. Also, end-of-semester examinations were conducted, using some of the academic and administrative staff of the University.

**Challenges Encountered and Solutions**

The yearly increases in enrolment on all the programmes raised a host of challenges, both internal and external.

Two of the internal challenges arose from the University’s academic staff. The first was concerned with a persistent demand for increments in the writers’ fee, which they justified by the refusal of the Academic Board to give the desired weighting to the modules for promotion purposes. The writers demanded a higher remuneration for producing the modules in lieu of the low rating and the restrictions on the number of modules required for promotion to certain grade levels. Based on the standpoint that DE is both an academic and business enterprise, the University leadership consented to the writers’ demand and adjusted their fees as and when necessary. At present, US$6,000.00 is paid for writing a three-credit module. Basically, what we stand to derive from the sale of the modules is the determining factor in fees adjustments.

The second issue related to the use of one mode of delivery (print) instead of a combination of media. While the latter was considered, it was not feasible at the initial stages due to lack of funds. However, with the current annual income of over US$12.0 million, the University now has the finance required to diversify the delivery mode.

An external factor linked to the problem of funding is the use of rented premises for the face-to-face sessions and examinations. Occasionally, a threat of ejection and the use of the facilities by the host institution for other purposes have been worrying issues. Indeed, the University now has the financial resources to construct its own premises in the regional capitals and equip them with modern technology to meet international standards, and a project for this purpose will start in August 2009.

With the positive developments in the University, our dream of becoming a world-class DE institution will soon become a reality.
REFERENCES

