### PARTNERSHIP FOR HIGHER EDUCATION IN AFRICA EDUCATIONAL TECHNOLOGY INITIATIVE

### **EXTERNAL EVALUATION OF PART A**

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### Contents

		Page
Summary and conclusions		
Introduction		
About the evaluation		
Findings: Part A outputs		
Findings: Outcomes		
Looking forward: Institutional success and risk factors		
Ar	nnexes	
1	PHEA ETI Evaluation Plan	31
2	Core questions for Part A evaluation visits to institutions	37
3 Ce	Interview guide for one-to-one discussions with SAIDE- T consultants, July/August 2009	39
4	Summary of reports of Part A evaluation visits to the ETI	
institutions		
5	The main focus of Part B project proposals at each	
institution		
6	PHEA ETI Contextual Framework for Research	78
7	Principal ETI-related documents consulted in evaluation	
of Part A		

### PARTNERSHIP FOR HIGHER EDUCATION IN AFRICA EDUCATIONAL TECHNOLOGY INITIATIVE EXTERNAL EVALUATION OF PART A

### SUMMARY AND CONCLUSIONS

The Educational Technology Initiative (ETI) is a four year programme funded by the Partnership for Higher Education in Africa (PHEA), a consortium of foundations. The PHEA ETI began in 2008 and has seven participating institutions from six countries.

The ETI is managed by a team of facilitators drawn from or contracted by the South African Institute for Distance Education (SAIDE) and the Centre for Educational Technology (CET), University of Cape Town.

The vision for the Initiative is:

To support interventions in partner universities to make increasingly effective use of educational technology to address some of the underlying educational challenges facing the higher educational sector in Africa.

There are two distinct Parts to the programme<sup>1</sup>:

- Part A: A set of institutional level activities to identify needs, envisage possibilities and make specific plans for the use of ICTs in and across PHEA institutions.
- Part B: A set of projects and strategies arising from Part A activities.

Part A came to an end at all institutions in March 2010.

This first evaluation report provides both a summative assessment of Part A of the ETI, and a formative review of the programme as a whole. The two aspects are intertwined and complementary.

The planned outputs for Part A are the principal reference points. The findings and conclusions for these outputs are set out below.

## A model for engaging institutions in the development of effective, integrated ET Strategies.

• There was very good engagement between the facilitators and the institutions. The evidence from key informants, and direct and indirect

<sup>&</sup>lt;sup>1</sup> Although the ETI is often referred to as a project, in this report it is a described as a <u>programme</u> to distinguish it from the Part B <u>projects.</u>

observation of the interaction between the two groups, points unequivocally to a very constructive relationship, one based on respect and trust.

- Part A took longer than expected. Some institutions had difficulty creating ET strategies and project proposals. The approval phase was also lengthy, particularly where projects were submitted by the funders to external assessment. This led to frustration. However a remarkable feature of the programme so far is the tenacity of the institutional teams in keeping faith with the programme.
- The resources provided by SAIDE-CET were mostly very helpful. There were exceptions:
  - The Research toolkit was not much used.
  - The ETI web pages up to now lack interactivity.

### Seven comprehensive ET Strategies including Part B project proposals.

- The project proposals are sound, although some may be too ambitious.
- There is a need to convert them into full project plans with explicit expected outcomes and more detailed monitoring and evaluation.
- The enveloping ET Strategy documents are still work in progress at most institutions. They need to be revisited through a more inclusive process of engagement to achieve full institutional buy-in.
- The ET Strategy logical frameworks are variable in their usefulness.

### A coordinated research programme, which comprises local-level research activities conceptualized and developed under the auspices of an overarching set of questions.

- The research component has not developed as expected. This has been a disappointment mainly to SAIDE-CET.
- Few pure research projects came up from the institutions.
- Some of the important research questions will be covered by the evaluation process.
- The main reasons for the lack of momentum in the envisaged research component were:
  - Insufficient interest and/or capacity in research to galvanise into a coordinated programme.
  - The hunger for the practical implementation projects tended to eclipse the less tangible benefits offered by research.
  - Lack of a shared vision for research in the SAIDE-CET team.

### A network of researchers established across participating institutions.

- This has not happened yet.
- There needs to be a network or networks open to all players in the ETI.
- The inter-institutional workshop in February 2010 is designed to kick-start this process.

Part A of the ETI was not designed to promote any specific outcomes. Nevertheless, the participating institutions reported benefits already stemming from the Part A processes. The principal ones are:

- Transversal teamwork.
- Better understanding of ET's potential.
- More experience in project planning and proposal writing.

### Institutional success and risk factors for the ETI

One of the objectives of the evaluation activity in Part A was to identify institutional success and risk factors for the ETI going forward. The following were the principal factors identified (the first two being the most important):

- 1. Institutional leadership.
- 2. ETI management.
- 3. Institutional culture.
- 4. ET in institutional strategy. Policy/strategy for ET.
- 5. Institutional structures and processes.
- 6. Infrastructure, equipment and systems.
- 7. The momentum of ET for teaching and learning.
- 8. Capacity in ET for teaching and learning.
- 9. Champions.

10.Synergy with parallel interventions.

The strongest of these factors at present, taking the seven institutions as whole, appear to be:

- Institutional leadership.
- Infrastructure, equipment and systems.
- Synergy with parallel interventions.

The factors where the institutions, on the whole, seem weakest at present are:

- Champions.
- Capacity.
- Culture.
- Institutional structures and processes.

### INTRODUCTION

The Educational Technology Initiative (ETI) is a four year programme funded by the Partnership for Higher Education in Africa (PHEA), a consortium of foundations<sup>2</sup>, originally established in 2000 to coordinate their support for higher education (HE) in Africa. The ETI is managed by a team of facilitators drawn from or contracted by the South African Institute for Distance Education (SAIDE)

<sup>&</sup>lt;sup>2</sup> PHEA now consists of: The Carnegie Corporation of New York, The Ford Foundation, the John D and Catherine T MacArthur Foundation, the Rockefeller Foundation, the William and Flora Hewlett Foundation, the Andrew W Mellon Foundation, and the Kresge Foundation.

and the Centre for Educational Technology (CET), University of Cape Town.<sup>3</sup> The Directors of CET and SAIDE provide strategic direction for the project. The CET-SAIDE facilitation team consists of seven people: a project manager and educational technology specialist contracted by SAIDE to manage the PHEA ETI programme, a project administrator, two additional educational technology specialists and three research specialists.

The PHEA ETI began in 2008 and has seven participating institutions: Kenyatta University, Kenya (KU) Makerere University, Uganda (MAK) Universidade Católica de Moçambique (UCM) University of Dar es Salaam Tanzania (UDSM) University of Education, Winneba, Ghana (UEW) University of Ibadan, Nigeria (UI) University of Jos, Nigeria (UJ)

The programme proposal document<sup>4</sup> (the ETI Proposal) had this as the vision for Initiative:

To support interventions in partner universities to make increasingly effective use of educational technology to address some of the underlying educational challenges facing the higher educational sector in Africa.

The ETI's strategic objectives are to:

- Support teaching and learning initiatives which integrate educational technology (ET);
- Promote collaborative knowledge creation and dissemination;
- Get core institutional systems to work so that they support teaching and learning more directly; and
- Research and report on educational technology activity in African universities by means of a long term project.

There are two distinct Parts to the programme<sup>5</sup>:

- Part A: A set of institutional level activities to identify needs, envisage possibilities and make specific plans for the use of ICTs in and across PHEA institutions; and
- Part B: A set of projects and strategies arising from Part A activities.

The programme began full operations in October 2008. In July 2009 it was anticipated that Part A activities would be finalized at the end of September 2009

<sup>&</sup>lt;sup>3</sup> References to SAIDE-CET are to the ETI consultancy team.

<sup>&</sup>lt;sup>4</sup> Effective Technology Use in African Higher Education Institutions: A Proposal for Phase Two of the PHEA Educational Technology Initiative. SAIDE and CET at UCT, April 2008.

<sup>&</sup>lt;sup>5</sup> Although the ETI is often referred to as a project, in this report it is a described as a <u>programme</u> to distinguish it from the Part B <u>projects.</u>

and that Part B activities in some institutions would begin in late August of that year. The programme is scheduled to finish in the second half of 2012.

### ABOUT THE EVALUATION

### Purpose and scope

An external evaluator was appointed in June 2009 and began inception work in July. The evaluation of the PHEA-ETI is being conducted through a real-time process. The external evaluator has continuous access to programme and project documents and periodic access to programme actors, both in the institutions and SAIDE-CET.

In turn there will be regular evaluation outputs, including four comprehensive reports, roughly at annual intervals. The last of these will be the PHEA-ETI summative report. The first is this report on Part A.

The Part A evaluation report provides both a summative assessment of the first phase of the ETI, and a formative review of the programme as a whole. The two aspects are intertwined and complementary.

The summative assessment looks at what has been achieved in Part A and how this has happened. The planned outputs for Part A are the principal reference points. Although the programme makes use of logical frameworks, neither the programme nor the evaluation is being conducted on strict logical framework lines. The evaluation will look at what emerges in the programme - whether planned or unplanned - and seek to explain it through analysis of the interplay between programme and context. Context is treated as part of the programme and not as something external.

The main purpose of the summative dimension of the report is to identify lessons about Part A that may be valuable for future practice in similar contexts. As with all evaluations, there is also an accountability function: providing stakeholders with an assessment of how effective Part A has been.

The formative perspective of the report focuses on indications from Part A of how Part B is likely to progress; and what will help to maximise the value for stakeholders:

- It assesses the ET Strategies that make up the submissions to PHEA.
- It identifies potential success and risk factors in the institutions and their environments.
- As there is a continuum in the engagement between the institutions and SAIDE-CET in Parts A and B, the formative perspective looks at what is working well and what may need adapting.

• It flags up a number of questions that should be answered in the evaluation of Part B.

The real-time nature of the ETI evaluation means that the evaluator has already reported to the institutions and SAIDE-CET on his encounters and documentary reviews. One of the main functions of the evaluation is to provide timely feedback on effective practice and areas for improvement. There has been considerable discussion with the actors, which in some cases has already led to changes in practice.

Nevertheless this report provides a more considered and wider perspective that aims to provide additional insights for all stakeholders. The programme is clearly working well in general. This report does not aim to be a comprehensive narrative of Part A. This information is available elsewhere<sup>6</sup>. With the learning purpose in mind, it will focus mainly on what has worked well and what needs attention.

The full PHEA-ETI Evaluation Plan agreed in September 2009 is at Annex 1.

### Methodology

The Part A evaluation processes have been almost exclusively qualitative. They have mainly involved:

- Study of ETI documents and wider secondary sources
  - o for information on the programme and its context
  - o for evidence of programme activity
  - o as programme outputs to review
- Semi-structured interviews with key informants.
- Facilitated group discussions and workshops with institutional and SAIDE-CET teams.
- Observation e.g. of Part A engagement and of institutional infrastructure, equipment and systems.

There has also included a substantial amount of creative activity: discussing and constructing, with the institutions and SAIDE-CET, the evaluation framework for Part B and the respective roles of evaluation and other research in the programme.

### Encounters

The principal windows on the programme have been visits by the evaluator to the participating institutions and meetings with SAIDE-CET. There will be an inter-institutional workshop combining both groups of actors in Johannesburg in February 2010.

<sup>&</sup>lt;sup>6</sup> E.g. PHEA ETI First Annual Report, July 2009; SAIDE-CET and evaluation visit reports.

The timetable for the institutional visits was:			
UEW	18-20 August		
UJ	24-28 August		
UI	31 August to 4 September		
MAK	6-9 October		
UDSM	12-14 October		
KU	15-19 October		
UCM	15-17 February		

The visit to UEW was timed to coincide with the second formal visit by SAIDE-CET. This gave the evaluator direct experience of the SAIDE-CET facilitation process. In all other cases, the evaluation visits took place after the formal SAIDE-CET visits had been concluded.

With all the institutional visits, the evaluator's objectives included:

- Familiarising himself with the institutions, the institutional ETI teams, and other key players, including apex management.
- Appraising the emerging ET Strategies and project proposals.
- Conducting readiness and risk assessments. Identifying and assessing factors

   both within the programme's immediate environments and the wider
   institutions that might have a supportive or constraining effect on the ETI's
   progress.
- Discussing and promoting effective institutional-level monitoring and evaluation for the ETI.

A typical visit consisted of:

- Meetings with members of the ETI team.
- Familiarisation with relevant infrastructure, equipment and systems.
- A meeting with the Vice Chancellor and/or another member of apex management.
- One or more meetings with institution staff to discuss procurement, financial reporting and other university processes and structures that may impact on the implementation of the projects.
- Meetings with staff involved with the ETI projects, sometimes accompanied by the Deans of the Faculties involved.
- A workshop with key actors about monitoring and evaluation in the ETI. This consisted of discussions about:
  - The proposed monitoring and evaluation framework.
  - Their experience of the ETI so far: the programme design, the engagement with the SAIDE-CET team and the ETI tools, and consequent intra-institutional developments.

A set of semi-structured interview guides was produced for these visits (Annex 2).

The institutional visits were supplemented by email dialogue, principally with the ETI coordinators, for clarification, further information and refinement of visit reports.

The encounters with SAIDE-CET were in Johannesburg 13-14 July 2009, by video conference 16-17 November 2009, and (with CET) in Cape Town on 6 February 2010. There will be a two day meeting in Johannesburg following the inter-institutional workshop. During these meetings, the evaluator was able to

- Hear and discuss progress reports from the team.
- Interview individual members (the interview guide for the July meeting is at Annex 3).
- Help the team to refine expected programme outcomes.
- Discuss emerging findings.
- Discuss the monitoring and evaluation framework and evaluation's relationship with other types of research in the ETI.

There has also been a great deal of email dialogue with members of the team.

### **Documents**

The principal ETI documents consulted are listed in Annex 7. In the cases of the ET Strategies, project proposals and Memoranda of Agreement, the evaluator also had a critical review role.

### **Evaluation outputs**

The principal evaluation outputs so far have been:

- The evaluation plan.
- The guide to institution-level monitoring and evaluation and a complementary presentation.
- Seven institution visit reports, summaries of which can be found at Annex 4.

### **FINDINGS: PART A OUTPUTS**

The report looks at what outputs have been produced, how effective they have been or are likely to be in contributing to the objectives of the programme, and what lessons can be drawn for Part B of the ETI and for future programmes of a similar type.

The ETI Proposal gave the following as the expected outputs of Part A:

- 1. A model for engaging institutions in the development of effective, integrated ET Strategies.
- 2. Eight comprehensive ET Strategies.

- 3. A coordinated research programme, which comprises local-level research activities conceptualized and developed under the auspices of an overarching set of questions.
- 4. A network of researchers established across participating institutions.

Before the programme commenced the number of institutions – and therefore ET Strategies – was reduced by agreement to seven. Apart from that the Proposal's expected outputs have not been revised or superseded, and are taken as the principal points of reference for this report.

## **1. A model for engaging institutions in the development of effective, integrated Educational Technology Strategies**

The central Part A output is the facilitation model for the development of ET Strategies. The institutions referred to are African HE institutions, although it may have wider applicability.

A prototype of the model was developed prior to the first engagement with participating institutions, and adapted, as the programme progressed, through evaluation and self-reflection by SAIDE-CET. The aim was to produce an effective model, of relevance beyond the boundaries of the programme.

The main components of the model were:

### Engagement

- Two facilitation visits by consultants to each institution.
  - The first was designed to develop an understanding of the institution, ensure a common understanding of the ETI, begin work on the ET Strategies, and agree roles and responsibilities for implementation of agreed actions.
  - The second focused on providing support in writing the ETS document, as well as advise on project design and development of research proposals.
- Further, non face-to-face, facilitation.

### Resources

- A set of materials that were either used pro-actively in the workshops mainly PowerPoint presentations and an ETS template – or were available for background reading and reference.
- A website.

### Evaluation

- Readiness assessments of the institutions
- Internal evaluation of visits, self-reflection and reporting
- Real-time external evaluation.

### Delivery of the model

The model was delivered broadly as planned. The number of institutions was reduced from 8 to 7 because of changes in funding, but this is unlikely to have materially affected the scope of the programme. With a few exceptions, interaction has been gone broadly to plan. In three cases – UDSM, MAK and UEW - supplementary visits were necessary. Some contextual obstacles, particularly the Nigerian academic staff strike, led to postponement of visits.

The last facilitation visits took place in August 2009. Part B submissions, containing the latest versions of the ET Strategies and project proposals, in some cases were not completed until December. The delays in completing submissions were mainly due to slow response to communications by some institutions. In 2-3 cases there were real difficulties in framing the documents required by the submissions. These difficulties might have been overcome more quickly if resources had been available for additional facilitation visits. The dialogue with PHEA over most submissions has also been more extended than expected. These factors have delayed the start of Part B at most institutions until 2010, several months behind the timetable envisaged in July 2009.

The main problem, as mentioned above, was slow response to communications, and slow progress in work on ET Strategies and project proposals. There are two factors which probably explain most of this. One is time pressure on members of the institutional teams. None is allocated full-time to the ETI, and most do not have adjustments to their normal portfolio of responsibilities. The second factor is that some teams had capacity issues in moving the Strategies and project proposals forward. In these circumstances, programme timetables have to allow for delays – and the ETI seems to have had enough built-in flexibility to cope.

Nevertheless, progress at some institutions was much slower than at others, and a key factor here seems to be the degree of team work and delegation. Where work was effectively shared among team members – while still being coordinated – progress has been good. KU, UJ, UI and UCM are all examples of this.

Despite the ETI's emphasis on the use of electronic media, email communication did not flow freely, especially in the early stages of the programme. This cannot entirely be attributed to time pressure. Connectivity problems may have played a part, but there also appear to be mindset barriers. Telephone communication was deployed by SAIDE-CET where email was not producing timely responses, but this is expensive. Without underestimating the connectivity and bandwidth challenges faced by most of the institutions, there might be scope for more, targeted, use of synchronous web communication – chat or VOIP, bi-lateral or multi-lateral.

The funders submitted two of the institutions' submissions to external assessors. Although this is common practice in funded educational programmes, it came as a surprise to SAIDE-CET and the institutions involved. It has not been possible to establish the rationale for selecting the two institutions in question. The impact of the external assessment process was both further to delay the start of Part B, and to damage morale at the two institutions. This was compounded at UCM by the nature of the assessment which was conducted without any contact with the institution or SAIDE-CET. As a result, it contained significant misconceptions which weakened the force of those of its criticisms that were appropriate.

Although the delays led to frustrations, there is no evidence that they have seriously damaged the programme at any institution up to now. The few examples of chronic or serial delays however may signify deeper challenges that may have implications for progress in Part B. The programme going forward will have tight and specific timetables. Responsibility for these will primarily lie with the institutions. They will be dependent on effective project management by the institutional teams.

### Quality of the model

Of greater interest is the quality of the model and how transferable it is likely to be beyond the boundaries of the programme. It will be easier to answer these questions with assurance later in the programme. But there are early indications that can be reported.

### Engagement

Probably the most important aspect of the model is the nature and quality of the relationship between the facilitators and institutional teams. The evidence from key informants, and direct and indirect observation of the interaction between the two groups, points unequivocally to a very constructive relationship, one based on respect and trust. The consultant-client relationship in development is often unbalanced and asymmetric in terms of power, particularly where consultant expertise is linked to the funding source. This is less apparent in the ETI than in many capacity interventions.

The evidence suggests the following positive aspects of the relationship, or factors behind it.

- SAIDE and CET are respected institutions with relevant experience. They are based, and mainly work, in Africa. The same is true of the ETI facilitators.
- The facilitators are seen as a step removed from the funders, mediating the institutions' relationships with them. However well intentioned and respected funders they might be, there is always tension in the relationship with development partners.

- The funders have not imposed onerous reporting frameworks. The frameworks are being designed with all stakeholders' needs in mind.
- The facilitators have adopted a client-centred, participatory, approach. Space has deliberately been created for the institutions to define their own needs and to a large extent their solutions. This approach is now common in rural development, but less so in institutional capacity building.
- There is a sense of mutual interest. The funders and the facilitators stand to benefit from new knowledge about how to make educational technology work for teaching and learning.

Striking the right balance was bound to be difficult between, on the one hand, freedom and responsibility for the institutions in determining the shape of the projects, and on the other, technical support and direction from the facilitators. The balance needed to be tailored to each institution, depending on its preexisting capacity for strategy and project planning, as well as experience with ET. SAIDE-CET were sensitive to this and, with the institutions, seem to have struck balances that have produced the goods – ETI submissions fit for purpose - without disempowering the institutional teams. There appears to be a good sense of ownership of the projects, although less so of the ET Strategies, an issue that will be discussed below.

All institutions needed help short-listing projects, costing them and drafting the ET Strategies and project proposals. Short-listing was a difficult process and left some project proposers disappointed. But this was mitigated to some extent by merging proposals. Where delays reduced the time left for the completion of submissions, or where the institutions were having difficulties, SAIDE-CET intervened more pro-actively. This seems to have been welcomed by the coordinating teams, although it is important that they take full ownership in the early stages of Part B.

The general mood is summed up by the view of one of the coordinators.

We like the [facilitators]. Unlike some donor missions they do not come here telling us what to do.

On the other hand, the same coordinator stressed that he welcomed help from the facilitators with the project proposals. This is something he normally had to do himself and rarely got feedback on.

The set of skills and experience required by the ETI consultancy team needed to consist of:

- Facilitation skills.
- Knowledge of ET's use in teaching and learning.
- Strategy and project planning expertise.
- Experience of African HE institutions and the challenges they face.
- Experience in educational and/or social research.

This set was available in the SAIDE-CET team overall, but when they split into teams of two to conduct the facilitation visits, facilitators with extensive knowledge of ET were not always available. This was seen as a weakness by members of two institutions and is a point for consideration. It may be argued however that extensive technical inputs from the facilitators in Part A would have detracted from the client-centred approach, and tempted the institutions to try to run before they were walking confidently with ET.

Face to face contact between institutions and facilitators in Part A could be as few as 12 consultant days at an institution. This was complemented with varying amounts of "remote" support. Most progress was made face to face. No-one should be surprised by that. This is a complex, pioneering programme without a clear template. At this early stage it has relied on the type of rich, nuanced, dialogue that is difficult without face to face interaction. It is likely that more of this resource – perhaps another 50% - could have been productively absorbed by the institutions without diminishing returns or disempowerment. In two or three it proved to be necessary. But in three or four of the institutions, it was probably not a critical factor in producing the Part A outputs.

The period from first visit to completion of the ETI submission ranged from 14 months at MAK to 4 months at KU. The average was 9 months. There are indications that a short, intense, period may be advantageous for maintaining the first visit momentum. For this to work the institutional teams would need to be able to devote the necessary time in that period to the ETI Part A journey. This might require strong and active apex management support, as was provided at KU. Even where the conditions allow an intensive Part A process, a certain amount of time is needed for internal consultation and reflection. This is likely to need 3 months or more.

Structured engagement with seven institutions across the African continent would be difficult without effective programme management and administration. Informants, and direct experience by the evaluator, point to a programme managed and administered very effectively and efficiently.

### Resources

SAIDE-CET produced a set of resources specifically for use in Part A of the ETI<sup>7</sup>. Most were in the form of PowerPoint presentations which were deployed in the first visit workshops sessions. The resources ranged from those designed to orientate – a presentation entitled *What's Possible in Higher Education with Educational Technology* and several research-related documents – to those relating specifically to ETI activities and outputs. The second visits focused on the ET Strategy templates and a document about criteria for fundable projects.

<sup>&</sup>lt;sup>7</sup> Available on the ETI website

http://www.oerafrica.org/phea/ProjectResources/tabid/327/Default.aspx

The resources were generally well-received by the institutions and clearly helped them move from a general awareness of the purpose and scope of the programme to the early stages of construction of ET Strategies and project proposals.

The presentation on ET possibilities, with 40 slides, probably packed in too much information for the novice participants. However, informants commented that it was a useful and accessible reference resource.

Informants were less convinced of the value of the research documents, especially the *Conceptual Framework* document and the *Research Journey*. The resources were probably too ambitious given the short time available to discuss research in the workshops. There wasn't time to move from theory to practice, and from the many issues raised by the documents to the few that were most relevant to the institutions. These issues about the research resources are bound up with other questions about the way research was positioned in the ETI which will be discussed below.

The most important ETI-specific document was the ET Strategy template. The template was intended to be a guide not a blueprint, and essentially a tool for the development of strategies by and for the institutions themselves. It included a proposed format for project plans.

From this perspective, its design was broadly fit for purpose. Facilitation was needed in the application of the template – in some cases, a considerable amount. But this mainly reflected the lack of experience among teams in developing institution-level strategies. The experience has been formative.

An area of the template that needs attention is the logical framework. The proposed project format in the ET Strategy does not include the logical framework; while a truncated version of the framework is included for the Strategy itself. Logical frameworks are more common at the project level, and if found at higher levels, typically take their references from lower levels in a "nested" structure.

Logical frameworks are not necessarily appropriate for strategies, particularly long-term wide ranging ones, although some sort of explicit programme logic or "theory of change" is an important feature. If logical frameworks are to be used in the ETI - and the current consensus in SAIDE-CET is that they should - they need to be used consistently, in a joined up way. They should also be used flexibly and dynamically, as tools for iterative planning and communication, and not as reporting straitjackets. A separate issue is whether the ET Strategy logical frameworks should embrace existing, planned and envisaged projects outside the scope of the ETI. If the Strategies are to be inclusive in this sense, then the logical frameworks should too. The key question then would be the probability of "envisaged" projects. These questions about the logical framework should be revisited in the early stages of Part B.

The main issue with the ET Strategies is not the format of the template, but the use that has been made of it in Part A. This is discussed below.

### The website

There were no direct references to a website in the ETI Proposal, but it is the norm today that a programme on the scale of the ETI has a web presence.

Web pages for the ETI were established early in Part A within the site for OER Africa, another ET programme operating under the auspices of SAIDE. The pages have been used mainly as an access point for ETI resources both general and institution-specific. A number of third party resources have also been placed on the website, mostly from developed country universities.

The institutional teams said they found the website useful for accessing resources. However there is a consensus that it could have provided more resources (e.g. through links to other sites) and also tools for inter-institutional collaboration (forums, blogs etc), and for interaction with the facilitators.

Although an enhanced website was not in the original programme plan and budget, SAIDE-CET have been working to produce a more interactive site. It is not yet operational., and thus the opportunity has not yet been fully exploited. An enhanced website could be used for communication, and as an awarenessraising and capacity-development instrument for Web 2.0 educational technology, possibly within an LMS framework. In Part A this might have helped to galvanise interest in the institutions in the periods between face to face contact with SAIDE-CET. It is recommended that adequate resources are devoted to this in Part B.

### **Evaluation**

A feature of the ETI is the strong emphasis placed on evaluation both internal and external. The ETI aspires to evaluate instruments, activities and outputs in a timely way so that lessons can be learnt and acted on. It provides structured opportunities for reflection by SAIDE-CET on progress. It intends that the summative evaluation of the programme as a whole is located in a research framework which will be of interest to a wide community. It also intends the participation by the institution in evaluative research to be a capacity-building experience.

The intensity of appraisal and evaluation work reflects the view that the ETI's legacy will include new understandings of how to effectively mobilise ET for teaching and learning, which contexts are most favourable, and what challenges are likely to be met.

Some evaluation in the ETI is ex-ante: appraisal of the institutions and their projects prior to key phases of activity. The programme itself was preceded by extensive scoping research through the PHEA Think Tank.

The institutions were appraised through a baseline questionnaire prior to engagement and during the first visits by the external evaluator.

The baseline questionnaire appears to be a sound one. It gave the teams a useful understanding some baseline parameters, particularly the use being made of ET, the state of infrastructure and equipment, and governance structures and processes.

Readiness is also about human factors such as capacity, motivation and empowerment. These are difficult to capture with questionnaires, but the experience already gained in Part A - including the external evaluator's - is helping to identify wider success and risk factors.

First consultancy visits were followed by an immediate reaction questionnaire administered by the team. In some cases the completion rate was probably too low to provide a reliable assessment of the effectiveness of the visit. Nevertheless, SAIDE-CET are confident that, taken together, the feedback from this source and their own observations enabled them to identify areas for improvement throughout Part A, and issues to monitor in Part B.

What is clear is that lessons, about communications and workshop format for example, were applied regularly in Part A or flagged for attention in Part B. It is difficult to know for sure whether they were the right lessons, but it does appear that the engagement processes were more streamlined in the later part of the schedule.

One gap in the evaluation net seems to be eLearning Africa. Several ETI participants attended eLearning Africa in Dakar, Senegal, in May 2009, with separate PHEA funding. This provided potential opportunities for, among other things, intra-programme networking, the acquisition of new knowledge and ideas, and external profile raising for the ETI. The eLearning Africa participation was not assessed formally, so there are no reliable indications of the value of the

investment, what follow-up might have been useful, and what to plan for next time.

The February 2010 inter-institutional workshop in Johannesburg will be the first time structured reflection by the institutions on progress has been facilitated by SAIDE-CET. The timing is probably about right. The institutions discussed the value and legitimacy of self assessment during the external evaluator's visits. They should be prepared to engage with it in Johannesburg.

A danger of intensive evaluation activity is that it produces too much detail. The wood may become obscured by the trees. Nevertheless, the early indications suggest that this aspect of the model is working well and will play an increasingly valuable role.

### Wider use of the model

Implicit in the ETI's objectives is that, if the facilitation model appears to be effective, it should be widely disseminated. The ETI Proposal indicated that dissemination would be achieved in the following ways;

- Lessons learnt to be written up in the form of a research paper
- The model to be prepared as a toolkit
- Case studies on ICT use to be shared on the website

Experience from Part A suggests that the model is likely to be widely applicable. The timing of dissemination depends whether the model is seen as a Part A phenomenon, or one that also extends throughout Part B. If the latter, it will be further assessed in forthcoming evaluation reports.

### 2. Comprehensive Educational Technology Strategies for each institution

The most tangible outputs of Part A are the institutional ET Strategies. According to the ETI Proposal, they should present "a coordinated vision and programme of action for future educational technology activities and investments at the institution" whether funded by PHEA or not. They are meant to be strategic instruments owned by the institution, independent of and transcending the ETI.

At the same time, the ETI Proposal also makes it clear that the ET Strategies would "lay out a programme of investment by the PHEA in identified educational technology activities" up to 2012. As such the strategies were intended to be closely oriented around the ETI.

These roles are potentially complementary. The wider scope could include the narrower. However it has proved difficult to focus on both at the same time. Only two institutions – KU and UCM – included non-ETI projects in their ET Strategies. Given the constraints on facilitation resources, the ETI orientation

took precedence over the wider role of the Strategies. Development of a longterm institution-wide strategy requires an iterative multi-stakeholder process for which there was insufficient time and resource in Part A.

In the short run this may not matter. The wider scope of the ET Strategies should be further developed during Part B by the institutions. Although there is no explicit provision for assistance with this in the ETI, it may not be require significant additional resources. Strategies can be effectively developed reflexively, building on practical experience of projects and other activities. The important thing is to re-engage with this in Part B. It will require a purposeful exercise of re-orientation and planning. Each institution should devise its own approach. Some already have strategies partly or wholly dedicate to educational technology. Each institution has its own protocols for adopting new strategies.

The Proposal envisaged that the Strategies would "define a parallel programme of research activities, driven by key research questions and needs." This has not happened for reasons that will be explored below.

Three other issues for strategy development - beyond that of scope - emerged during Part A. One is about time, the second is about timing and the third is about ownership.

Strategy development often need weeks of focused input. This was not possible through Part A face to face facilitation, and some institutions found it difficult to continue the work on it. Timing – in relation to project development was also a factor. Where time allowed, the articulation of strategic vision would normally precede the design of programmes of action to deliver it. The constraints on the Part A process meant that the ET Strategies and projects were developed more or less simultaneously, rather than sequentially. This may not matter; in fact sometimes emerging strategies benefit from an iterative relationship with project delivery. But this places a premium on regular engagement between the strategy development process and lessons learnt from the projects.

Strategy development should be an inclusive process led by influential stakeholders. Although the ETI succeeded in involving apex management in some Part A activity in most institutions, in the majority their active involvement in programme activities was not sustained. Apex management does not necessarily have to be present in strategy development activity provided it is lead with visibly delegated authority and there are effective and regular channels of communication with apex management. Two or three of the institutions fall into this category. However, in the majority of the institutions the ET Strategies have not yet reached a position where the institution as a whole can be said to have ownership. If this does not change it is likely to detract from buy-in and the effectiveness of the ET Strategies going forward.

Further work with the Strategies should mitigate these effects. The Strategies should be seen as work-in-progress and at some point in the programme, there should be a process at each institution where they are revisited and revised with the optimum set of stakeholders. This process can draw on experience to date with the ETI projects and other relevant interventions.

This section has focused on the status of the ET Strategies and not their content. The content is generally appropriate and comprehensive enough for this stage in their development. Comments on individual Strategies have been made by the evaluator in his visit reports and need not be repeated here. The logical frameworks need attention from a content point of view. There are good examples - such as UDSM which benefits from simplicity - but most others need improvement in the definition of their outputs, outcomes and indicators, and the relationships between them.

### Projects

The ET Strategies developed under the ETI at the seven institutions contain 26 projects proposed for funding by PHEA. The number of projects per institution range from two at UDSM to six at KU. This disguises the fact that the proposed total funding at each institution is similar (roughly between \$325,000 and \$450,000), signifying that some projects are much bigger than others. For example the Online Course Migration and Improvement project at UDSM is costed at over \$300,000, while the Executive Information System Specification project at KU is estimated at about \$8500.

The difference in project numbers between institutions reflects the variation in diversity among the proposed projects. KU's projects are probably the most diverse, while at UDSM and UEW, the focus is narrower. This in turn reflects the breadth of involvement in the ETI at each institution.

Annex 5 presents a typology of the projects. One of the most striking aspects of the matrix is the concentration on e-content. This is not surprising given where the institutions stand on the ET development curve. All institutions will be working with learning management systems either from a standing start or with existing systems that have not yet been fully exploited.

There are advantages for both implementation and evaluation in the focus on econtent and learning management systems. There is more scope for creating an active community of practice both within and across institutions where teams are following parallel paths. Evaluation, both formative and summative, will have more traction through the scope for comparison.

The other striking feature of the matrix is the small number of projects where the main focus is research – there are currently only four in the submissions;

and one of these may be in jeopardy. This is surprising, bearing in mind the original twin track design of the ETI. This has inevitably led to a re-appraisal of the status and role of research in the programme.

Nine of the projects are outliers, having little in common with any other. They all have potential to produce benefit for their institutions and will be evaluated accordingly. They should make useful contributions to understanding of institutional success and risk factors. But their uniqueness may limit their contribution to transferable knowledge of technical and pedagogical aspects of ET development.

Project proposals that have been included in the submissions are the result of iterative filtering and reflexive improvement processes by the institutional and SAIDE-CET teams. Some have also been amended in the light of comments by the evaluator and representatives of PHEA. There is probably not much additional value in a project-by-project critique. However, the completed review of project proposals suggests some issues that should be flagged for attention in Part B.

- The project proposals contain much useful information, but more work is needed to convert them into actionable project plans. More help with project planning may be needed.
- It is suggested above that projects should have simple logical frameworks. In particular, most lack a vision of realistic outcomes and no plan for evaluating them.
- It is important that the projects are popularised within the institutions at appropriate stages. Some have this built into their plans. It may be useful for each institution to develop a communications strategy for the ETI as a whole.
- It is important that teams begin to think beyond Part B well before it finishes. Strategies should be developed for multiplying built capacity and for upscaling other project benefits. The evolving ET Strategies will be the appropriate platforms for this.
- There has been much discussion about whether the project portfolios at some institutions are too ambitious. The evaluator concurs with the consensus in PHEA and SAIDE-CET that it is better to focus resources – including institutional staff time which may be the scarcest commodity - on a small number of projects. I recommend a review and if necessary a further process of scaling back, by December 2010.
- If critical choices have to be made about which projects to continue to support, it seems important for the wider impact of the ETI to retain some in the mix that are scalable, as well as those that have wide reach in themselves. The mix should also contain innovative projects as well as "safe" ones.

# 3. A coordinated research programme, which comprises local-level research activities conceptualized and developed under the auspices of an overarching set of questions.

The creation and dissemination of new knowledge about the application of ET in African HEIs has been an intrinsic part of the rationale for the ETI from its inception. The ETI Proposal pointed out that the predominant research literature in ET stems from Western countries and that "the particular contextual and cultural issues that impact upon ICT-supported teaching and learning initiatives in Sub-Saharan Africa remain relatively unexplored and undocumented". The intention was to embed a research strand in the programme "in tandem with the development and implementation of projects in the seven universities".

Three dimensions to the proposed research strand can be identified from the early programme documents.

- The first would be a set of research activities at the institution level, some as a dimension of implementation projects, others as independent projects, but linked conceptually. Within this dimension there would be three types of research:
  - Preliminary research to inform the development of a project and the strategies adopted in its implementation.
  - Action research during a project which documents the cycles of planning and implementation in order to provide direction for the next cycle, to capitalize on successes and avoid errors or less desirable outcomes.
  - Evaluative research to provide a summative judgment on a project both process and results.
- The second dimension is a three-year research strategy designed to complement and inform research work at institutional level, and to ensure that local-level research activities are conceptualized and developed under the auspices of a common, overarching framework. This would be created prior to the commencement of the projects, and would include the mapping of research questions. However, the proposals for research also stressed that the strategy should not impose or direct research at the local level, and that the research questions apart from an overarching question<sup>8</sup> should emerge from the engagement with the institutions in Part A and be shaped by their priorities.
- The third dimension is a collaborative one. The intention was to "encourage research partnerships between the seven institutions or other relevant

<sup>&</sup>lt;sup>8</sup> Originally: How do higher education institutions in the PHEA ETI shape, enable, or constrain the uptake and implementation of educational technologies to address their teaching and learning challenges?

groups, and promote collaborative projects that will benefit from such a joint endeavour". The aim was to "move away from the 'individual champions' models to one that supports communities of practice, both within and across universities". This falls under the fourth and final programme output, which is discussed in the next section.

Focusing on the first and second dimensions, three principal issues stand out.

- The relationship between research as promoted by the CET facilitators, and the external evaluation brief.
- What the three-year research strategy meant in practice.
- How much interest was generated in research in the institutions in Part A.

Of the three types of research at the local-level, the second and third are indistinguishable from the approaches to evaluation adopted by the programme. Action research translates as the real-time formative evaluation activity envisaged in the Evaluation Plan for Part B. Evaluative research, as described in the research agenda, translates as the summative dimension in the Evaluation Plan. This too would be brought about through a partnership between local-level activity, and external support and pan-programme analysis.

This convergence of the original research agenda with the emerging evaluation planning should have provided an opportunity for collaboration at an early stage in Part A. Mainly for logistical reasons the dialogue about this did not achieve the necessary momentum until much later. This delayed progress on a revised research agenda.

The second issue is what exactly the three-year research strategy and the common overarching framework would look like. This was not fully resolved in Part A, partly because of the third issue, the limited interest in research that was apparent among the institutional teams; and partly because of a "chicken and egg" dilemma posed by the CET approach. With few research projects being developed by the institutions and no strong interest emerging in wider research questions, CET could not find enough pegs on which to hang a framework.

The final issue is the lack of momentum generated by the research motor of the ETI. As already reported, there are only four projects where research is the main focus. One of these may not go forward. Another is a summative evaluation of an implementation project, rather than a separate research project in its own right. That may leave only two pure research projects – those at UEW and MAK.

This would not matter if it is accepted that institution level research should focus on the implementation projects, deploying preliminary, action and evaluative research. Although there is little significant preliminary research in the project proposals, all contain references to formative and/or summative evaluation. With support, this evaluative research will produce the main body of data for the summative evaluation on the programme as a whole. This in turn will seek to answer "how" and "why" questions that should have relevance beyond the programme, as well as simply reporting what has happened in it.

However it is clear that there were expectations in CET for another layer of research activity, one that would answer questions posed in a wider framework, and employing more rigorous research methodologies. It is now clear that this is not going to happen without a new round of promotional activity.

There seem to be three main reasons why research did not resonate in Part A. One is the lack of research experience and capacity in educational technology at the institutions. There was insufficient awareness of the possibilities and how to go about leveraging them. The research resources deployed in the Part A workshops in many cases were too difficult to engage with.

The other side of this coin is that there is so much hunger for the practical implementation projects that promise to deliver ET building blocks: effective learning management systems and e-content and the capacity to develop more. This tended to eclipse the less tangible benefits offered by research.

The third factor was a lack of clarity among some SAIDE-CET team members about the role of research. It was seen to some extent as a bolt-on and not as an integral part of the programme.

A revised research plan has been produced. It follows a more conventional research path in that the initiative will be shaped and managed by CET, rather than by the institutions, although their participation will be invited. In the light of experience in Part A, this looks like the only feasible way forward. It also clarifies the separate and shared roles of the research team and the external evaluator.

### 4. Network of researchers established across participating institutions.

There are two principal observations about this expected output. The first is that it did not happen in Part A. This is principally because SAIDE-CET has not yet devoted time to mediating it. Inter-institutional networks do spring up of their own accord, but there are few precedents for this in African HEIs. There has been negligible activity of this type so far in ETI. The e-Learning Africa event in May 2009 might have led to inter-institutional networking but this does not appear to have happened.

The second observation is that network promotion should not be restricted to researchers but should include participants in all types of ETI project activity. As mentioned already, there are few projects where research is the main focus. Research – mainly action and evaluative research – will be mostly embedded in

the implementation projects and conducted by the main project staff. In any case, there may be as much benefit to be gained from collaborating about practical aspects of implementation as about wider learning derived through research.

The February inter-institutional workshop is designed for intensive networking. For this to be sustained and take root in a structured network, continued mediation will be needed. Synchronous and asynchronous interaction, and the sharing of materials, through the web should play an important role, as well as more opportunities for face-to-face encounters.

The ETI Proposal envisaged extending the sharing of knowledge and experience to other institutions – to enable them to benefit from the learning from Part A. This could be done through for example evaluation and research reports and papers and presentations at the next eLearning Africa. It is probably better to restrict the structured network to the ETI institutions to begin with until it establishes momentum. Research on communities of practice suggests that openness and learning is more easily generated where members of a community are sharing the same journey, and the boundaries are known.

### FINDINGS: OUTCOMES

### **Outcomes from Part A**

Understandably, no expected outcomes were identified for Part A as it has largely been a prelude to the main part of the programme. It is too early to formally evaluate outcomes for the ETI as a whole. Nevertheless informant interviews and observation suggest that a number of "green shoots" may already be appearing. These are not fully triangulated findings, but they are worth noting as examples of outcomes that may not have been anticipated or articulated so far in the programme planning.

- Overall, there is more interest in, and commitment to, ET for teaching and learning in the institutions than at the beginning of Part A. This is primarily the galvanising effect of the Part A process, which in one or two institutions has triggered self- momentum. This galvanising effect is not guaranteed. In some institutions momentum has slackened; and this might have had the reverse effect - of weakening interest and commitment.
- There is a better understanding in the institutions of what ET can do for teaching and learning. This also follows from the Part A process and its offshoots in local pursuit of learning about ET.
- There is a better understanding in the institutions of how to develop ET strategies, plan projects and put together funding bids. This is a partly-

expected outcome, but has probably been more significant than anticipated. It needs to be developed further.

Other aspects of organisational development have been reported by informants, in particular increased team work across faculties, and higher visibility and status for ET units. These are fragile outcomes and will rely on the effectiveness of both project processes and results.

There is a better understanding in SAIDE-CET of how to support capacity development in ET for teaching and learning. As has been mentioned above, learning through reflection and evaluation is a component of the ETI Part A model. SAIDE-CET have been the principal participants in this so far. This should also be a regular feature of Part B, and not just a summative exercise in 2012.

### **ETI outcomes generally**

This is a good moment briefly to take stock of expected outcomes for the ETI as a whole.

The 2008 Proposal put forward three high level outcomes for the ETI:

- Improved pedagogical practices using educational technology, which impact on the key teaching and learning challenges facing African higher education.
- Well-functioning collaborative networks across the partner universities which allow for accelerated transmission of good practice across the networks and improve access to good practices from elsewhere through access to larger international networks.
- Research outputs from researchers based at the partner universities in several areas including educational technology which are essential to Africa's development and effective dissemination of these outputs both across the partner universities and globally.

These generalised outcomes were refined and expanded at a SAIDE-CET workshop in July 2009 and the following set of five outcomes was agreed.

- 1. ET strategies in place and operational in all institutions.
  - a. Budgets for investments in ET for teaching and learning are significantly increased in the majority of institutions.
  - b. ICT infrastructure strategies clearly linked to the ET Strategies in at least three institutions.
  - c. Institutional management information systems include data relating to ET for teaching and learning. Evidence that these data are being used in decision-making.
- 2. Improved teaching and learning practices in some areas of every institution through the application of ET; with replication (or momentum towards it) in other areas.

- 3. At least three institutions achieve, or are on course for, significant improvements in productivity through the application of ET for teaching and learning.
- 4. A community of practice around ET for teaching and learning established, with active participation from people in all institutions, and some from other African HEIs.
- 5. New transferable knowledge of how to develop capacity in the use of ET for teaching and learning in African higher education. Dissemination of that new knowledge beyond the ETI players.

The ETI Proposal also anticipated a number of more specific outcomes at the institutional level – such as increased capacity, more supportive institutional structures, and new multimedia resources in active use - while stressing that it was necessary to wait until the projects had been framed to be clear about realistic outcomes at this level.

Each institution should articulate expected outcomes from the ETI. There has been some discussion as to whether this needs to be reflected at project level. This evaluator's view is that each project should articulate the outcome(s) to which it will contribute. This helps to orientate the project team and it may be taken up in the projects' summative evaluation. There should be a line of sight between institution and project level outcomes, just as institution level outcomes should be reflected in those for the ETI as a whole.

This is still work in progress. The ETI would benefit from a two or three tier logic model for better understanding and communication of the programme scope and dynamics. This should have its more detailed counterpart in a logical framework for planning and evaluation purposes. Work will done on this at the interinstitutional workshop in February.

## LOOKING FORWARD: INSTITUTIONAL SUCCESS AND RISK FACTORS

During the evaluator's visits to the seven institutions, and in discussion with SAIDE-CET, he looked for indications of what might be the most significant success and risk factors for the ETI going forward. The conclusions are summarised below. They are expressed as success factors. Low scores on these factors would signify a risk of underperformance or even failure.

The issues relating to the institutional teams and their wider environment. They correspondent mainly to the institutional level in the ETI contextual framework for research (Annex 6) and to all four "factors"<sup>9</sup> in that model. The first two are probably the most important.

<sup>&</sup>lt;sup>9</sup> Socio-economic, organisational, pedagogical and epistemological, and technological.

### 1. Institutional leadership

Senior management is respected, cohesive, decisive.

It has shown by its behaviour that it is committed to the advancement of the institution and its principles.

It personally demonstrates its commitment to the improvement of teaching and learning through the use of ET.

### 2. ETI management

The programme coordinator has leadership qualities.

The team is cohesive.

The team has a broad base in the institution.

The team has relevant skills and experience.

The team has sufficient time to devote to the programme.

The team is committed, engaged, empowered and enthusiastic about the programme.

### 3. The momentum of ET for teaching and learning

The institution's experience to date of ET suggests growing, rather than waning, momentum.

There is a high level of staff interest in ET.

There is a high level of demand from students.

### 4. Culture

The institution generally has a culture of innovation and achievement that would be conducive to programmes like the ETI.

### 5. ET in institutional strategy. Policy/strategy for ET.

ET for teaching and learning features prominently in the institution's overall strategy.

There is an agreed policy and/or strategy for ET (apart from the ETI ET Strategies).

The unit with main responsibility for ET is appropriately positioned in the organisation.

The unit with main responsibility for ET has a high status and is respected.

### 6. Institutional structures and processes

The institution's structures and processes are likely to be conducive – rather than obstructive - to the ETI.

The institution's reward system – formal and informal - supports the objectives of the ETI.

### 7. Champions

There are staff members with relevant experience of ET for teaching and learning who can be mobilised as champions for the ETI's objectives.

### 8. Capacity in ET for teaching and learning

The institution already has a critical foundation of knowledge and skills in ET for the ETI to build on.

### 9. Infrastructure, equipment and systems

The institution's infrastructure equipment and systems – especially for ICT – is appropriate, extensive and robust enough for the requirements of the ETI going forward.

### 10. Synergy with parallel interventions

Other programmes and projects at the institution, particularly in ICT and ET, are likely to complement – rather than detract from - the ETI.

These factors have resonance for all the institutions. The model will be further developed during Part B and used regularly in evaluation.

Informal appraisal by the evaluator and SAIDE-CET at the end of Part A suggests that some institutions are currently located towards the risk end of the continuum in relation to some of these factors. The factors where the institutions, on average, seem weakest are:

- Champions
- Capacity
- Culture
- Institutional structures and processes.

On the other hand, relative strengths, taking the seven institutions as whole, appear to be in:

- Institutional leadership
- Infrastructure, equipment and systems
- Synergy with parallel interventions.

A key question for the ETI going forward is: *What can be done to strengthen the success factors, and help the institutions remove, mitigate or by-pass the risks?* This is a responsibility of both the institutions and SAIDE-CET.

### ANNEX 1 PHEA EDUCATIONAL TECHNOLOGY INITIATIVE EVALUATION PLAN

### Background to the PHEA Educational Technology Initiative (ETI)

The strategic objectives of the ETI are to:

- Support teaching and learning initiatives which integrate educational technology (ET);
- Promote collaborative knowledge creation and dissemination;
- Get core institutional systems to work so that they support teaching and learning more directly; and
- Research and report on educational technology activity in African universities by means of a long term project.

These priorities are regarded as key components of an integrated strategy for intervention to improve ET use across the partner universities. They represent a long-term programme of action and research for harnessing technology to support higher education delivery in African institutions, within which any single project needs to be located and which such projects need to contribute to advancing.

A two-part approach will be used for the programme<sup>10</sup>:

- Part A: A set of institutional level activities to identify needs, envisage possibilities and make specific plans for the use of ICTs in and across PHEA institutions; and
- Part B: A set of projects and strategies arising from Part A activities.

### Purpose and audiences for the evaluation

The evaluation will be both formative and summative. It will serve four main purposes:

- Provide regular feedback, particularly to the SAIDE-CET team but also to the institutions and PHEA funders on the efficiency and effectiveness of the programme as it rolls out, with the objective of improving its positive impact.
- In collaboration with the research-focused members of the SAIDE-CET team and institutional partners, produce a summative report which will, among other things, contribute to global understanding of how to develop capacity in the use of educational technology for teaching and learning (ET4TL) in African higher education.
- By collaborating with the institutions in the evaluation of projects, support the development of their capacity in evaluation.
- Report to the PHEA consortium what value has been created through their funding.

The main audiences for the evaluation will be the SAIDE-CET team, the partner institutions and the PHEA consortium. Wider communities in higher education, educational technology and development assistance will be reached, mainly through release of reports and other documents on the website. They may also be pro-actively targeted e.g. at forums such as eLearning Africa.

### Focus

The evaluation focus will be wide and inclusive. It will cover all the main elements of the performance spectrum:

<sup>&</sup>lt;sup>10</sup> The ETI is referred to as a <u>programme</u> to distinguish it from the Part B <u>projects.</u>

- resourcing (including resource-effectiveness)
- processes/activities
- outputs
- outcomes
- sustainability
- relevance.

Without an ex-post impact assessment, it may not be possible to say much about actual sustainability, although its potential will be evaluated.

At the highest level, the evaluation will be guided by the programme's expected outcomes. A set of expected outcomes was presented in the April 2008 proposal document;<sup>11</sup> and has recently been re-defined at an ETI evaluation planning workshop.

These outcomes are:

- ET strategies in place and operational in all institutions.
  - Budgets for investments in ET4TL significantly increased in the majority of institutions.
  - ICT infrastructure strategies clearly linked to the ET Strategies in at least three institutions.
  - Institutional management information systems include data relating to ET4TL. Evidence that these data are being used in decision-making.
- Improved teaching and learning practices in areas of every institution through the application of ET; with replication (or momentum towards it) in other areas.
- At least three institutions achieve, or are on course for, significant improvements in productivity through the application of ET4TL.
- A community of practice around ET4TL established, with active participation from people in all institutions, and some from other African HEIs.
- New transferable knowledge of how to develop capacity in the use of ET4TL in African higher education. Dissemination of that new knowledge beyond the ETI players.

Indicators linked to the ETI's expected outcomes will be developed.

It is generally recognised that in capacity development, it is rarely possible to predict realistic outcomes with a high degree of certainty at the beginning of a programme. There are too many variables and those outside the programme's control can have a powerful influence. It is important therefore to keep an open mind about realistic outcomes. Expected outcomes may therefore change both quantitatively and qualitatively as the programme progresses. The evaluation will operate with this assumption. It will also look for unplanned and unexpected outcomes, both positive and negative, including equity effects.

Just as expected outcomes may change, the programme's planned activities and outputs may also change in response to reality.

<sup>&</sup>lt;sup>11</sup> Effective Technology Use in African HE Institutions, April 2008

Because the success of capacity development depends on a number of factors in the organisational and external environments, the evaluation focus will extend to aspects of governance and management – particularly procurement - in the institutions, and will also look out for external factors that might have an important bearing on the success of the programme. These findings may be reported separately.

### Methodology

Results and their attribution in capacity development are rarely clear-cut. Evaluating them requires a triangulation process to be reasonably sure what changes have taken place, how and why.

### Self-assessment

Self-assessment, by both the SAIDE-CET and institutional teams, will be an important part of the triangulation process. This is both a matter of practicality and effectiveness. The evaluator will have infrequent direct contact with the institutions, and will be highly dependent on feedback from the people on the ground. This however will create the space for a high level of participation in the evaluation process which is acknowledged as the best way to embed learning from it.

Self-assessment will be supported by the evaluator. He will agree with the teams the critical questions and indicators (where appropriate), and the processes for addressing them. He will facilitate the process face-to-face at least twice with each team during the programme.

Self-assessment of progress towards the programme's goals will be complemented by cross-assessment. The SAIDE-CET team will assess progress in the institutions; and the institutional team will give feedback on the effectiveness of the SAIDE-CET team's support. There may also be scope for some inter-institutional peer-assessment when the teams meet at the proposed annual workshop.

### Independent assessment

The evaluator will have direct contact with the SAIDE-CET team and institutions on a number of occasions. These will provide opportunities for interviews and facilitated group discussions (FGDs) with the programme and institutional teams and other relevant people in the institutions such as university leadership. There will also be occasional opportunities for direct observation, e.g. of the SAIDE-CET team support processes, and possibly of the application of ET to teaching and learning in the institutions.

The evaluator will assess the main documentation generated by the programme. Some of this will emerge from the self- and cross-assessment already referred to. Other documentation will relate to the ET strategies and to the institutional projects. The evaluator's role will be to review this documentation formatively – to enable improvements – as well as summatively in the overall evaluation of the programme's success.

### <u>General</u>

Evaluation of impact needs a base-line. For the ETI programme as a whole, there are base-line data – mainly qualitative – in internal documentation such as the ETI Proposal, institutional responses to an initial questionnaire from the SAIDE-CET team, Interim Progress Report and Part A visit reports; and external sources such as the Survey of ICT and Education in Africa and the Survey of e-Learning in Africa<sup>12</sup>. It is too late to collect any more base-line data for Part A. Baseline data will be captured for anticipated Part B activity both by the evaluator during his first visits and through the project planning and evaluation processes.

An increasingly important component will be evaluation of the Part B projects. Each project will be evaluated collaboratively by the institutional teams, the SAIDE-CET team, and the evaluator. The internal evaluation methodology will be defined in the project plans. Evaluation of specific projects will be complemented by overall assessments of the effectiveness of the project process, and the projects' contributions to the programme outcomes.

Although the evaluation as a whole will partly adopt "emergent" approaches,<sup>13</sup> it will be guided by the expected outcomes in the frame at the time. In the ETI team reflective session scheduled for early 2010, it may be helpful to extend the programme logic model down to the levels of intermediate outcomes and outputs. We could also identify critical assumptions underpinning the expected outcomes and outputs.

As such the logic model will begin to resemble a Logical Framework (LogFrame). However it is not intended that the planning and evaluation of the programme will be tied to a strict LogFrame. The SAIDE-CET team propose to create an ETI LogFrame. This is intended primarily to monitor outputs from the institutions, and it is not clear at this stage what role this will play in the evaluation.

There will be no counter-factual – control group – in the evaluation, although comparisons will be made at the summative stage with past and current programmes with a similar purpose, to help answer questions about the relative effectiveness and relevance of the ETI.

Most of the data obtained by these methods will be qualitative in nature. However, quantitative data may emerge in these circumstances:

- Monitoring of financial inputs
- The M&E of certain types of project
- Monitoring the outputs and immediate outcomes of events such as workshops etc
- Possible longitudinal surveys of e.g. changes in perceptions, access and use in the institutions.

<sup>&</sup>lt;sup>12</sup> Farrell, Glen; Isaacs, Shafika; & Trucano, Michael (eds.). 2007. *Survey of ICT and Education in Africa* Washington, DC: *info*Dev / World Bank. Unwin, T. 2008. Survey of e-Learning in Africa, Paris, UNESCO.

<sup>&</sup>lt;sup>13</sup> Emergent approaches to planning and evaluation are predominantly inductive rather than deductive. They recognize that institutions and communities are complex dynamic systems and may not be susceptible to linear change processes with pre-defined outcomes and performance indicators.

The summative, and to some extent the formative reporting, will use both institutional case studies and themes (such as key competencies and infrastructure) to frame the findings and conclusions. Case studies will focus mainly on positive change.

### Products

There will be periodic updates to the evaluation plan.

There will be a hierarchy of evaluation products (see Figure 1), with a final summative report, delivered in the final months of the programme, at the peak. Below this there will be a comprehensive Part A report (due in early 2010) and two programme-wide formative reports for Part B, delivered by the end of 2010 and 2011. These formative reports should ideally be presented in person to the SAIDE-CET team to enable dialogue and improvements to the evaluation process and products.

Feeding into these reports, but also providing timely, actionable feedback, will be regular visit reports, reflective and issue-focused memos and conversations.

Presentations on evaluation findings and issues could be produced for inter-institutional workshops and other encounters.



### Encounters

First visits to all seven institutions will be made by the end of December 2009. These visits will provide opportunities to (among other things):

- Familiarise the evaluator with the institutions and the main players.
- Assess the processes, outputs and outcomes of Part A activities.

- Identify and assess the important environmental drivers and constraints in areas such as institutional governance, incentives and procurement – relevant to the programme's objectives.
- Support the setting up of self-assessment structures and processes.
- Contribute to an assessment of the base-line for anticipated Part B activities, in collaboration with the SAIDE-CET team.
- Support the development of Part B project evaluation.

A first institution visit would include:

- An initial get-to-know-you meeting with the PHEA ETI team.
- A brief tour of relevant parts of the infrastructure.
- A meeting with the Vice Chancellor/Rector.
- Meetings with the office-holders responsible for budgetary planning and procurement.
- A workshop with the team to reflect on progress in the ETI so far and to agree the process of self-assessment for here on.
- Individual meetings with the head of virtual learning, head of the ICT, Deans of faculties involved in the latest draft/agreed Part B projects and other people involved in these projects.

The first visit to UEW is planned to coincide with the second Part A SAIDE-CET team visit, to provide first-hand experience of that process. Other first visits will be made independently.

Additional visits to the institutions will be agreed at later stages.

An important part of the programme-wide evaluative process will be facilitated reflective sessions with the SAIDE-CET team and at inter-institutional gatherings. The first one of each type is scheduled for early 2010. There should be a reflective session of each type near the end of the programme, and ideally one every year feeding the annual formative reports.

Further contact with members of the SAIDE-CET team will be made telephonically and face-to-face.

Patrick Spaven 07.09.09
# ANNEX 2 Core questions for Part A evaluation visits to institutions

# Senior management

What is your vision for the university in the next 5 years?What will be the main challengesWhat contribution will ICT make?What about ET for teaching and learning?What will help you to bring about these changes?What do you hope the ETI's contribution will be?What will be the main challenges to developments in ET for teaching and learning?

## Finance and procurement management

Tell me about the university's procedures for procurement. Where does authority lie for commitment, for approving payment? What are the thresholds? What are the processes and how long do they take? Use examples of:

- Equipment
- Software
- Consultants
- Honoraria

Temporary staff
Is there a fast track route?
Is there a troubleshooting role?
Tell me how pre and post audit work?

# **ETI** management

Describe the university's ICT journey Tell me about ICT infrastructure. Describe the university's experience with ET for teaching and learning What has gone well? Why? What has been disappointing? Why? What is your vision for ET for teaching and learning over the next 5 years? What are the drivers? Are there credible champions? What are the challenges? (Resources, capacity, culture, attitudes, politics, structures, status, etc?) How do you propose to overcome the challenges?

How has the ETI gone so far? Can you identify any benefits already? Have there been any disbenefits? How easy was it for you to:

- Construct the ETS?
- Identify projects?
- Construct project proposals?

What do you think about the rationale, shape and conditionality of the ETI? What do you think about the two strands: implementation and research? What about the interventions by SAIDE-CET?

- Their visits
- Their remote facilitation
- Their resources, including the website

• Their administration.

Have you networked with other ETI institutions so far in Part A?

How do you see the ETI adding value in future?

- The projects
- The overall process

What will be the drivers of the programme?

What will be the challenges?

Do you have any views on the sustainability of the benefits?

What do you need from SAIDE-CET team? From the evaluator?

What are you planning to do with the ETS?

Tell me about other external inputs to ET for teaching and learning - now and the pipeline? How will the ETI sit with them?

# ANNEX 3 Interview guide for one-to-one discussions with SAIDE-CET consultants, July/August 2009

In the universities you have worked with in Part A:

- 1. What in your experience have been the most significant positive changes in the partner universities so far? What do you think has contributed most to these changes?
- 2. What have been the greatest disappointments? What do you think lies behind the disappointments?
- 3. What ETI processes and activities have worked particularly well?
- 4. What ETI processes have not worked well?
- 5. What are the main drivers for positive change in the universities, of direct relevance to the ETI's goals?
- 6. What are the main obstacles and constraints to the ETI's goals?

# ANNEX 4 Summary of reports of Part A evaluation visits to the ETI institutions

# Report on Visit by Patrick Spaven, External Evaluator for the PHEA-Educational Technology Initiative (PHEA-ETI), to University of Education Winneba (UEW) 18-20 August 2009

The visit was the first in an initial series of evaluation visits to the seven universities in the PHEA-ETI. Unlike the other visits, this one coincided with a Part A visit by two members of the SAIDE/CET team.

My time was spent mostly in work sessions with the institutional and SAIDE/CET teams on the ETS and the three project proposals. The exceptions were:

- A meeting with the Vice Chancellor (VC)
- A discussion with a staff member of the External Funds Office
- Discussions with James Williams, the leader of the institutional team
- A meeting with the institutional team about monitoring and evaluation
- A private meeting with the institutional team about the interventions of the SAIDE/CET team and the Part A process in general.

# The Part A process observed

UEW had not been able to send their draft ETS and project proposals ahead of the visit, so time in the work sessions was spent trying to reach a mutual understanding of the documents and their institutional context, before progress could be made in improving them and filling in gaps. This produced valuable new information about current ICT infrastructure, capacity and use at UEW as well as a more detailed narrative about how they had arrived at this point. However, it did not leave much time for work on the documents and the SAIDE/CET team steered the process more strongly than in other circumstances.

Although this approach helped to ensure that adequate progress was made by the end of the visit, there was a risk that ownership of the ETS and the project proposals by the UEW team would be weakened.

As far as the projects were concerned, there was no clear evidence of loss of ownership. Members of the UEW team challenged ideas put forward by the SAIDE/CET team; and there was often a lively round-table discussion about the best way forward. This almost always led to an apparent consensus, although it was often a hurried one.

I raised the issue of ownership with the UEW team in the private session. They said emphatically that, as far as the project proposals were concerned, they had seen the SAIDE/CET team's contribution as fine-tuning and not as a "take-over". This assertion however did not extend to the ETS.

Whatever the merits or demerits of the strong steering, there was probably no alternative if the visit was to make the required progress within the allotted 3 days. A longer visit would probably have yielded diminishing returns as the process was intense and tiring.

Considerable progress was made in the three days, probably as much as could have been expected. But the late start on the ETS and project proposals by UEW, and the fact that the SAIDE-CET team did not see the documents until the beginning of the visit, means that their finalisation will not be done in concert.

The rapid progress during the visit was helped by the fact that only four people were involved on the institution's behalf. However, there is a potential downside to the ETI's narrow base at UEW - an issue I expand on below.

In the private discussion, I asked the UEW team what they had found most and least helpful in the support from the SAIDE-CET team. The main message they conveyed was that they saw the support as facilitative. The first visit had helped them to better understand the PHEA scope and requirements, to identify gaps in their ET4TL<sup>14</sup> capacity and to stimulate and guide their thinking about ways to fill these gaps. It also made them aware of the value and practicalities of research for ET4TL.

From my observation, one of the main benefits of the sessions with the SAIDE-CET team was the experience of thinking through the practicalities of survey design and implementation.

They said they saw the 2<sup>nd</sup> formal visit as a healthy dialogue about their proposals over which they retained ownership. They had nothing negative to say about it.

# The ETS

At the end of the visit, there was still work to do on the UEW ETS, particularly in the areas of teaching and learning, governance and management, stakeholder analysis, monitoring and evaluation and the logical framework. I was not left with a clear picture of how closure on this will be achieved.

At several points in the work on the ETS, I had the impression that the UEW team were not sure who the ETS document was predominantly for: them or PHEA/SAIDE-CET. This was partly a result of the steering of the discussions on the ETS by the SAIDE-CET team, which was stronger than with the projects. The UEW team recognised the principle that a strategy should inform projects, but in this case the cart has, out of necessity, come before the horse. Time did not allow for a formal strategy development process: an inclusive dialogue within the university about its challenges and how ET can address them.

I have no doubt that work with the SAIDE-CET team on the ETS will produce some value for the UEW team, particularly in re-affirming the importance of planning projects in response to agreed needs and future uses. But I do not expect it to be a shaper and driver of ET development for some time. This may not matter. For an institution with limited experience of strategy development around ET4TL, the ETS is probably best seen as an evolving instrument in a symbiotic relationship with the projects, each informing the other. I do not expect UEW to be the only institution in the ETI to be in this position.

Contributing to the sense of detachment from the ETS that I perceived is the structure of the template. It contains too many headings and requires information that can be difficult to assemble, and may not be critically important to the promotion of strategic thinking around ET4TL in the institutions. At UEW, much of Part 1 of the ETS template falls into this category. Completing the ETS felt more like producing a funding bid than creating an important instrument for the university's own use.

One element of the ETS – the logical framework - may need some further thought, or at least clarification, by the SAIDE-CET team fairly urgently. Is the ETS logical framework primarily intended to be for the institutions, or for PHEA/SAIDE-CET?

# The project proposals

I do not need to say much about the project proposals. I took part in their development and I am satisfied with the overall mix and shape. I think the balance of three research projects to one implementation project is not inappropriate in an institution that has

<sup>&</sup>lt;sup>14</sup> Educational technology for teaching and learning.

limited absorptive capacity at present for ET4TL. I have not seen the full project proposal on multimedia, but am aware of its context, and from the summary in the SAIDE-CET reps' visit report, I am satisfied that it will add significant value if it goes to plan.

There was some debate about the overall value of the baseline research study, and of the scope of the Moodle evaluation study. The UEW team wanted to be more ambitious than the SAIDE-CET team. It is important to focus initially on potential use when framing research projects. We discussed this in the sessions. It is possible that the scope of the research studies, as proposed by the UEW team, went beyond what was likely to be readily usable by the university.

# Success and risk factors at UEW

## Procurement

Ghana has a national requirement that all public sector purchases over GHC20k (about US\$15k) have to be approved by the relevant Ministry. This involves competitive tendering, and the whole process would take at least 3 months, probably a lot more. The UEW team did not see any purchase under the ETI going down that route.

Internally, all spending – including daily honoraria - has to go to the VC for approval. I was told that this was not a bottleneck. The VC turns round approvals very quickly, especially for external projects. If there was any hold-up, James would call on the VC personally and get things moving. If the VC were away, there was always someone deputising where the same thing would happen.

Approval for purchases – equipment, software etc – above a low threshold, requires three estimates. These are usually solicited by the project staff, so there should be no hold up there.

It is important of course to have a budget allocation for all proposed expenditure. This is an important factor in project design. All conceivable costs should be covered in the project budget and there should be flexibility – with proper accountability of course between items.

# External Funds Office (EFO)

This small office – about 7 staff - has been in place since 2007. Its functions are said to be threefold:

- Source external funding and manage donor relations
- Monitor and evaluate the implementation of externally funded projects
- Develop project management capacity.

Even in its present form, the EFO is likely to be of help to the ETI. Although it has no formal role in procurement, in can troubleshoot. The "monitoring and evaluating" role is essentially about checking whether things are done according to the project schedule and following up internally if necessary.

#### The UEW ETI team

The programme manager will be Dr Yidana, who will take over as Director of ICT in September. He returned from Ohio about a year ago where he did a PhD in ET. He will share responsibility for the ETI with Julius Nutakor from the EFO, and Mr Tete-Mensah from the Institute of Distance Education and Extension. Each will bring different, but complementary qualities to the programme. It is important that they continue to work as an integrated team. The team may be supported by Mr James Williams, the former Director of ICT in a consultancy role.

# Diffusion of ET4TL

The biggest risk factor at UEW, I believe, is the narrow base of involvement, so far in ET4TL, both in the ETI and other activity (under Carnegie for example). Although the ETI projects envisage involvement by other academic staff and multi-media staff, none participated actively in our sessions

One pre-existing activity with wider involvement is the re-engineering of some distance education material, with multi-media and innovation in instructional design. The material will be conveyed to the students via CDs. This Carnegie-funded project seems sound, but has progressed more slowly than planned. It will be evaluated through one of the ETI projects. It is important that the evaluation generates wide interest.

Another potential plus factor is the flow of staff from postgraduate ET programmes in Ohio. They will need to be given responsibilities commensurate with their new competencies.

# Other factors

The VC will serve, I understand, another three years. He is supportive of the ETI. At my meeting he asked the Director of ICT to report on the status of the project proposals and ETS at the end of the SAIDE-CET visit. The VC approved the US\$25 annual levy on students to fund new equipment.

This levy will be needed to improve the ICT infrastructure seemed. The UEW distance learning resource centres have little or no connectivity; wireless speeds are often very low on the campus, and much equipment needs replacing. These problems was said to be due largely to "difficulties" experienced with some of the donor-funded projects.

Another issue is the lack of incentives for academic staff to engage with ET4TL. The current system only rewards them formally for publishing research. Reward and recognition need to be addressed strategically by UEW.

Time, as well as competence is a component of capacity. Few staff have much time outside their main job and other commitments to work on programme likes the ETI. Thought should be given to building some continuity support, probably in project administration rather than management, into project plans and funding. This is difficult with small projects like those in the ETI, where a full post would not be needed or justified. However a project assistant could be shared across the whole programme at UEW.

# The self-evaluation model

I discussed an early version of the institution-level evaluation model that will provide essential feedback on progress, benefits, drivers and obstacles periodically through the ETI. The core team seemed more than comfortable with the model. To work well, the process needs an open, candid approach to strengths and weaknesses, achievements and disappointments. The best learning is often from things that have not gone well.

# Conclusion

The most likely model for sustainable momentum at the institutions participating in the ETI is an escalating number of staff engaged hands-on with ET4TL, combined with a sensitisation process among staff not yet engaged with it to create interest and dispel fear. The aim should be to reach a tipping point where engagement with ET4TL by staff is regarded as the norm. Students probably don't need much encouragement. Once they

see that it is on stream in some parts of the institution, demand should grow organically. With supply and demand feeding off each other, ET4TL could be seen as systemic.

That process is not fully under way at UEW; and it is asking a lot of the proposed projects alone to promote that momentum, especially as only one of them is designed directly to build capacity.

Green shoots will be fragile. UEW will need to make the most of the ETI window to sensitise and advocate within UEW, keeping pace with the tangible benefits and knowledge emerging from the projects. The process will need to be carefully managed. Above all there needs to be a clear strategy for harnessing the results of the research projects to create further momentum.

# Report on Visit by Patrick Spaven, External Evaluator of the PHEA-Educational Technology Initiative (ETI), to University of Jos (UJ) 24-28 August 2009

The visit was the second in an initial series of visits by me to the seven universities in the PHEA-ETI.

My timetable consisted of the following elements:

- A meeting with Daniel Inusa Yakmut, Acting Director of ICT and Team Leader
- Several meetings with the institutional team as a whole
- A meeting with the Vice Chancellor (VC)
- A tour of ICT facilities
- A meeting with the "Virtual Office" for externally funded programme administration.
- Separate meetings with the Deans of the Faculties of Law, Arts, Pharmacy and Natural Sciences and the leaders of the faculties' involvement in the ETI projects.
- A half day workshop on monitoring and evaluation consisting of a presentation by me and a discussion. Participants were members of the institutional team plus Dr Patricia Lar, Chair of the Jos-Carnegie Partnership Committee.

# The Part A process

The UJ team thought that Part A had been a "good space" to develop ideas about how ET could benefit teaching and learning at UJ and complement what was already taking place. They liked the transmission of international experience by the SAIDE-CET team, but also the shift from Western-sourced approaches and the opportunity to develop approaches that were appropriate to their context and culture.

There were no strong criticisms, but some issues came up. The principal one centred on the ETS. UJ has an e-Learning Strategy which is part of a wider ICT Plan. The Plan also has offshoots in a user policy and an acquisitions plan. The UJ team didn't see the need for a separate ETS and found the requirement for an ETS and the process of developing it a bit inflexible. They would prefer to borrow elements from the ETS to improve their e-Learning Strategy.

Other issues:

- There was no sense of ownership of the ETS logical framework...
- The UJ team had been concerned at what they saw as an initial bias towards OERs. They were pleased that this was modified to give institutions the choice.
- They thought that the deadline for producing project proposals had been too short for wide canvassing and optimal team formation.

Despite these issues, there were very positive sentiments towards the SAIDE-CET team and the ETI as a whole.

# The project proposals

<u>e-Learning Fellowships.</u> This builds on a scheme begun about a year ago under the Carnegie grant, which has so far benefited 7 staff members. It develops capacity in e-Learning for selected staff through a series of interventions – including external mentoring - over a one year period. e-Fellows apply their learning to develop on-line course content during their tenure.

Over the next three years, the ETI will support 24 e-Fellows. Carnegie will support another 30. With anticipated diffusion training by the e-Fellows, the UJ team estimate that the university will have about 100 staff well-trained in ET4TL in three years time.

This project is a straightforward extension of a tried and tested formula (it was evaluated as part of Tranche 2 evaluation). It addresses one of ET4TL's key success factors:

capacity development. It seems to be a low-risk project. The main issue is probably the supply of candidates for the Fellowships – both in numbers and quality.

<u>MultiMedia and Simulations.</u> By contrast, this project is innovative. It will introduce simulations and multimedia into on-line course material in pharmacy, microbiology and theatre studies. Apart from an isolated project by one staff member, the university has done nothing like this before; and it is probably relatively unusual in most parts of Sub-Saharan Africa. It involves three different departments and four different learning areas. The student numbers range from over 1000 potential users of the virtual microbiology lab to 35-40 in theatre studies.

The theatre studies component is something of an outlier and is unlikely to be readily transferable to other study areas at UJ. It will have to work hard to demonstrate its value.

With innovation comes risk; but there is room for that in the ETI. It is important that this project is carefully monitored and evaluated, in particular to compare the pathways and results for the four different components.

<u>LMS</u>. This involves capacity building and course development for an LMS (Moodle). This is a familiar strand in the ETI. The similarity of these projects across the ETI as a whole will provide a rich environment for comparative analysis through M&E. An interesting feature of this project is the involvement by the Faculties of Law and Arts – not normally early movers in ET, unlike the third department, Computer Science. However, both Arts and Law at UJ have a history of involvement in ET, so they are already somewhere up the learning curve.

## Success and risk factors at UJ

#### Procurement

UJ has what it calls a "Virtual Office" (VO) for externally funded programme administration. It consists of staff in finance, audit and the Advancement Office who work as a virtual team dedicated to donor-funded projects and programmes. It was established in 2006 with encouragement and continuing financial support from Carnegie.

The VO spokesman said that they do not offer any relaxation of financial control, but the procurement process is more devolved for externally-funded projects, by-passing the Bursar (unless the donor insists on his/her involvement). Also the fact that the members in different functions work closely together ensures that the procedures are followed with expedition. Donor requirements for financial reporting are said to be well-understood by the VO staff who are responsive to requests.

Directors of externally-funded projects are appointed by, and report to, the VC. Project directors have devolved authorization for approving purchases of all types – except new staff - below about 1 million Naira (about US\$6500). This ceiling is said to be flexible. The VC approves purchases above that and all new staff requests.

#### The institutional team

Daniel Yakmut is the team leader. He has been at UJ since 1995. He is Acting Director of ICT having worked as Deputy Director for some years. The last substantive Director of ICT left about a year ago.

The rest of the diverse team were appointed by the VC from a short-list put forward by Daniel Yakmut.

#### Diffusion of ET4TL

The SAIDE-CET first visit report refers to a "fledgling ET use culture". It depends on your benchmarks of course, but I would be inclined to modify this statement somewhat. A number of initiatives predated the ETI – I heard of nearly 10 – although it is true that there was no university-wide attempt to integrate them until the development of the eLearning Strategy about a year ago. This Strategy does not yet have wide currency, but it has been signed off by the VC. It takes its authority from Goal 6 of the University's Corporate Strategy which envisages the harnessing of ICT for high quality learning.

The eLearning Strategy lacks a thorough needs analysis, but it hits the spot with many of its 33 action areas. It recognises the importance of research and evaluation, devoting two out of its six goals to these processes. Among other things it calls for departments to develop their own eLearning implementation plans.

The other promotional and integrative force is the Carnegie grant. There have been six years of activity and a third 3-year tranche is in the pipeline. Although only a small proportion of the Carnegie initiatives have been in ET, these, particularly the e-Fellowships, the Moodle training and the interactive classroom in Natural Sciences, seem to have been well designed and executed.

40% of the Carnegie funding has been devoted to ICT infrastructure and capacity including the well-crafted student "intern" scheme for technical support - providing a firm and broad ICT platform for ET4TL to exploit. All faculties have ICT coordinators and committees. There is an ICT basics course on the LMS for all university staff; and staff can buy laptops through a cooperative scheme. One issue highlighted by the evaluation of Carnegie ICT projects is the continuing gender imbalance (deficit of women) in involvement in ICT at UJ.

UJ has adopted an incremental approach to the development of ET4TL which probably understates the potential interest. The ETI should be able to harness the latent interest and take some further big steps. ICT infrastructure

ICT infrastructure is relatively good. Every faculty and some departments have their own computer lab. Some have generators and/or batteries to deal with daily power outages.

I experienced satisfactory wireless and wired bandwidth. There are fibre cables to the other campuses. The PHEA subsidy has brought cost down the cost of bandwidth by about 40%. UJ is planning to increase bandwidth incrementally every year. The West Africa fibre cable is expected to double bandwidth for same price within the next two years.

80% of computers are said to be functioning. There is a five year replacement (acquisition) plan. There are eight ICT technicians – the number doubled recently.

On the negative side, UJ had what they see as a false start in LMS experience with KEWL. They met with serious sustainability issues, especially maintenance. KEWL will be retained for their NETTEL Africa on-line courses, but they are now putting their faith in Moodle, which has some ground to make up. They currently have only one trained Moodle administrator.

#### Other factors

The VC seems supportive of the ETI and of ICT generally. He is Chair of the ICT Board (a sub-group of the University Council). He will leave office in June 2011.

The Deans of all four Faculties involved in the proposed projects, took the trouble to join us at the Guest House and participated actively in the discussions. This is a good indicator of commitment.

The Carnegie grants are said to have promoted a "culture of planning and careful implementation". This has come from project management training and by hands-on planning and management of their projects. Many staff are now used to the reporting requirements of external funders.

The issue that came up most frequently in my conversation with people was reward and recognition. ET innovators are not given credit through the formal system – particularly "promotion points". These are still based on the publication of research. The ETI may be able to help prepare the ground for a change of policy by demonstrating the benefits to the university that can come from innovation in ET. The ETS could also be used as a vehicle for messages about this.

## Monitoring and evaluation

I held a three hour workshop on M&E for the ETI. This consisted of a presentation by me and a discussion. Participants were members of the institutional team plus Dr Patricia Lar, Chair of the Jos-Carnegie Partnership Committee.

There was a lively discussion among 3-4 of the participants, with Dr Lar in particular demonstrating good experience in the area, largely through her involvement with Carnegie. They found the programme-level self-assessment process I was advocating easy to understand and feasible. However, they will need support in M&E for their projects – particularly, I suspect, in indicator development.

## Conclusions

UJ already has a wider base of involvement, more momentum, and better ICT infrastructure than for example UEW. Much of this is due to the Carnegie interventions which seem to have been more successful at UJ than at UEW. (It would be useful to get hold of the recently completed evaluation of the second tranche at UJ.)

The Deans' involvement, and a meeting with the VC within hours of his return from the USA, encouraged me to believe that the university management is firmly committed to the ETI.

I do not have any major concerns about UJ at this point. The UJ core team have not had much experience working together to date. But this may not matter much. Each project seems to have a competent leader. All the projects have strengths and vulnerabilities. They will require good M&E to identify improvements. M&E in turn will need support from the ETI consultants.

# Report on Visit by Patrick Spaven, External Evaluator of the PHEA-Educational Technology Initiative (ETI), to University of Ibadan (UI) 31 August to 4 September 2009

The visit was the third in an initial series of visits by me to the seven universities in the PHEA-ETI.

My timetable consisted of the following elements:

- Several meetings with Prof. Ayo Oluleye, Coordinator of the ETI Development Committee
- A half day workshop with the ETI Development Committee and others divided into two parts: their presentations about the proposed projects; and my presentation about M&E. Both presentations were followed by discussions
- Separate meetings/conversations with the VC, DVC Academic, Bursar, Secretary of Audit, Liaison Officer for the Macarthur grant, Director of the Africa Regional Centre for Information Science and the Dean of Law.
- A tour of ICT facilities and a meeting with the Chair of the ICT Committee (and Director Management Information Systems) Dr Raji.
- A seminar on the ETI and its M&E with 24 Deans and Directors
- A radio interview and phone-in about the ETI (with Prof. Oluleye and a host).

# The Part A process

The UI team said they had found the Part A process somewhat taxing. Getting a consensus on the projects, particularly narrowing and scaling them down, had been difficult in the timeframe. For every day with the SAIDE-CET team, they had spent at least two in workshops themselves, plus a lot of work behind the scenes. This was not presented as a complaint, merely as feedback on the reality of the process.

One of the reasons the UI team had found it hard, I suspect, is that UI is an unusually consensus-minded institution. Important decisions are made by committees which can be quite large. Committees are usually slow at decision-making, although the decisions can be high quality if the process is managed well. The ETI institutional team is a committee of over 10 people. However, Prof. Oluleye speaks for the committee without hesitation. There is no hint of committee paralysis.

The team told me that working on the proposals has had unexpected benefits. It has increased their awareness of their strengths and weaknesses, and helped them to work as a team – to compromise for the collective good and not to hold onto their personal interests at all costs.

The timing was said to be ideal. UI has taken great strides, over the 7 years of its ICT Master Plan, in creating access to ICT. They were aware, before the ETI came into view, that they needed to make much more use of it. But they lacked experience and expertise to take that forward. ETI is helping them to do that.

They appreciate the nature of the engagement with the SAIDE-CET team. They said it was the first time any of them had experienced a partnership like this. They are used to engaging with grant-making donors through a bidding process with no help or insights into what the donors really want. If they win a grant, there is usually no outside help with problems that inevitably come up in the project. They said they are confident in the partnership with SAIDE-CET, and with me as the M&E resource, going forward.

They had found the ETS template quite useful. It had been an "eye-opener" in certain respects. They saw the processes of developing the ETS and the projects as synergistic. Once the ETS is fully developed and owned, it will help to inform future ET interventions.

UI had looked at the MOA and raised a few queries, including one about reporting. I was able to clarify the reporting requirements. They said they are still waiting for a response on a technical issue relating to arbitration.

They are not anxious about the ETS logical framework, as several of the committee have experience of them, some through working with Macarthur. However there was little recognition of it as a tool for their own use.

They said they had not felt under any pressure to go down the OER route. They saw that as a logical path for UI with its sense of responsibility for wider HE communities, but they wanted to go at their own pace, taking time to bring sceptics on board. I encountered some of that scepticism at the Deans' meeting.

Prof. Oluleye said that they had not found the pure research strand in Part A particularly useful. He did not see it as central to the programme at UI, although he recognised that all projects involved evaluation research.

# The ETS

UI are still working on the draft of the ETS document, and I was not able to see it during the visit.

Prof. Oluleye recognised the importance of thinking strategically about the application of ET. A new UI Strategic Plan is at the final consultation stage. The ICT Master Plan will subsequently be revised. Although the ETS will be subsidiary to it, the Plan will be informed by the ETS and the experience to-date on the projects.

Each of the proposed projects was presented confidently by a team member. There was a palpable sense of ownership. I contested some elements in each of them, and they were defended assuredly.

#### Capacity building and e-content development

This project brings together several of the early proposals which had these common elements. This will produce benefits in economies of scale and time, and help them to compare notes as the project moves forward in different contexts. It also has similarities to projects in other universities, providing scope for comparative evaluation.

The project focuses on courses which are difficult to deliver in conventional mode and/or which have had other difficulties.

They have worked out a 9-step implementation model which seems clear and logical. In practice they will have to be prepared for some overlap and iteration.

They are planning to use Nigerian resources as well as those from SAIDE-CET, which would be a sustainability factor. Another is the built-in sensitisation and advocacy activity with wider groups at UI.

Because of its wide reach, this project has major impact potential.

## Introducing tele-classroom teaching method into the General Studies (GS) Programme

Students enrolled in GS classes are counted in thousands. Lecturers are volunteers from other faculties and are insufficient. The tele-classes would locate the lecturer in a studio and tutorial assistants in satellite classes. The material could also be channelled to distance students through multimedia.

This is an obvious solution to a common problem, although UI has not tried it before. But it is not without risk. If the students do not find the experience engaging, they will not attend. Effective training in presentation and in tutor facilitation, and the adaptation of material are key components. Maintenance of equipment and the availability of power will also be very important (factors which are outside the scope of the ETI funding).

#### Open courseware for science and technology

In line with its mission to be a standard-bearing university in Africa, some staff want to venture into open courseware. This project will be a pioneering step in that direction for UI. It is also recognised that open courseware has the potential for continuous improvement.

This project has close parallels with the first one. They have similar criteria for selecting courses and will share some of the training. There are some distinctive features however that should not be lost in the implementation and evaluation.

# The use of educational radio and mobile phone in delivering tutorials for open and distance learning students

This project is aimed at the UI's 15000 distance students. All UI's distance courses are available for downloading on-line as well as in print. This initiative would complement the pre-existing material with radio broadcasts for students in the 60 kilometre radius of the UI's FM station, and downloadable MP3 and MP4 files for those beyond. Training would be similar to the tele-classroom project. This seems fairly straightforward.

The phone component is more innovative. It will make use of SMS messaging and one to one tutorials; but the main component will be tele-conferencing between lecturers and remote locations equipped with speaker phones. Interaction will be facilitated through coordinators at each location.

This part of the project is possibly unique south of the Sahara, apart from in South Africa. It will need strong advocacy and careful M&E.

# Success and risk factors at UI

#### Procurement

Despite decentralised budgets at UI, all payments have to be authorised by the Bursar or (if above 250k Naira) the VC. The Bursar said that approvals normally take 48 hours. This is followed by a pre-audit scrutiny which normally takes 24 hours. Audit will selectively query VFM and relevance of spending.

Most purchases take about 3 weeks from start to finish. Finance and pre-audit are decentralised which promotes speed in transaction. The UI Vision statement stipulates that there will be sanctions on people who delay payment through neglect or to seek advantage.

A project manager can get an advance - e.g. to pay honoraria and other expenses for training – against approval by the VC of a training programme plan. This is reconciled afterwards against an attendance register and receipts.

The VC has to approve the commissioning of consultants, but it is said that this also takes no more than 48 hours.

Temporary staff for e.g. project administration, would be treated like other project expenditure and not as staff on the central payroll

An Office of International Programmes has just been set up but is still without a Director. I was told it will have a role in coordinating and administering exchanges and in monitoring programmes. It is not yet clear how this will impact on the ETI.

#### The institutional team

It was not easy to assess the institutional team at UI as it consists of a committee of over 10 people.

Its coordinator, Ayo Oluleye, is Professor of Industrial Engineering in the Faculty of Technology. He recently stepped down as Chair of the ICT Committee where he oversaw the introduction of much of UI's ICT infrastructure. He had post graduate experience at Cranfield University. Under Prof. Oluleye's leadership I would expect the programme to move systematically forward. He says he is likely to be involved for at least two years.

Prof. Oluleye has nominated two other members of the committee to work with him as an informal executive sub-committee: Drs Ayotola Aremu (who was at eLearning Africa) and Egbokhare.

One third of the Committee are women, one the highest proportions among the ETI institutions.

# **Diffusion of ET4TL**

There is very little use of ET4TL at UI at present The only cases I heard of involved small-scale experimental use of eLearning in the Faculty of Education and in the General Studies Programme. White Boards have been introduced into classrooms in the Faculty of Education, but the training need was underestimated and they are still not fully operational, nearly a year after the initiative began.

The UI culture inhibits individuals making lone innovations. Several people said there were attitude problems relating to ET at UI. However there was a consensus that these problems could be overcome. Once the bandwagon begins to gather momentum, people will get on board. They won't want to be left behind. The UI tends to move forward slowly, but in step.

There has been an impressive amount of capacity building in ICT. 3000 staff have been trained under the Macarthur Foundation programme, despite it being voluntary. There is compulsory ICT training for students.

# ICT infrastructure

Virtually every member of academic staff either has a computer at their workstation, or a personal laptop. There is good wireless internet throughout the campus as well as networked computers.

There are insufficient lab computers for students, but many have laptops. 90% of campus computers are thought to be functioning at any time. Replacement is ad hoc, but not a serious issue.

UI has few full-time technicians, but they can be supplemented flexibly and cheaply by freelancers from the city.

The biggest infrastructure problem by far is power. Grid electricity is cut at least 80% of the day. This affects student and staff computing, although the central servers and wireless system is usually kept running through generators and UPS units.

The university has just installed two 4MW generators, said to be sufficient for the whole campus. They will be commissioned as soon as the university returns to normal business after the strike. The challenge will be offsetting the cost of running the generators – around four times the cost of grid electricity.

#### Other factors

The VC, an engineer, is supportive of the ETI and of ICT generally. He is fully aware of the challenges that ET can address. At UI, it is said that VC appointments are heavily influenced by senior staff preferences. With a Deanery that seems sensitised to ET4TL issues, this is probably a plus factor in sustainability.

The most obvious feature of UI is its self-image as the elite university of Nigeria. It is very conscious that it has a reputation to defend, and it seems that that the reputation they now want to project is of a forward-looking institution, embracing modern teaching and learning methodologies - and not one falling back on past glories and traditions. This could be a challenge in a university with a faculty average age of 49, a point mentioned by several people.

UI's espousal of a forward-looking approach is a big plus factor. The more it publicises its involvement in the ETI, the more likely it is to make efforts to ensure its success. (A small step was taken in this direction with the radio interview during the visit.) A downside could be that UI is reluctant to admit mistakes and sub-optimal performance.

UI is planning to shift the balance between undergraduate and postgraduate teaching. In two years, it is expected that 60% of students will be postgraduates. UI already produces 200 PhDs a year. It sees itself as a major supplier of academic staff to Nigeria's 96 universities and others in Africa. Success in diffusing ET4TL at UI would therefore have a pronounced multiplier effect elsewhere.

UI has a process to transform pedagogy, funded by the Macarthur Foundation, now one year into its two year life. Although this does not necessarily involve ET, it is an obvious motor in pedagogic transformation, and the ETI should get as close to the initiative as possible. Prof. Oluleye has brought the Committee's Chair, Dr Babarinde, into the ETI team and is planning a cross-fertilisation seminar.

Although UI works through committees, these are often independent of centralised control. In fact UI prides itself on its degree of decentralisation and autonomy. For example departments and other units are allowed to keep 65% of income they earn.

The MacArthur grant has promoted M&E capacity in the Sociology Department; and the Faculty of Technology has developed project management training capacity. Both are potential resources for the ETI.

#### Monitoring and evaluation

I spent about two hours presenting and discussing ideas for M&E for the ETI with the institutional team. The response was generally interested and positive. One idea in particular seemed to resonate with them: peer evaluation of projects. This might work at other ETI institutions where the project base is wide.

# Conclusions

UI is a highly structured, procedure-conscious and consensus-minded institution. It is not a model that immediately indicates innovation. However, in resource-poor and capacityweak environments, like Higher Education in most of Sub-Saharan Africa, it may turn out to be a winning model. UI does not generally bite off more than it can chew and that may turn out to be a critical success factor for effective deployment of ET.

This is not to say UI is risk averse. It believes in controlling risk through consensus decision-making, and checks and balances in governance and management.

The important thing is that UI senior management have decided to put their collective weight behind reform of teaching and learning, and are aware of the role that ET can play in that. This was clear to me from the productive meetings I had with the VC and Deputy VC Academic; and the impressive turn-out of almost all the16 Deans and most of the other unit Directors at the ETI seminar.

Reinforcing this commitment is UI's self-consciousness as a standard-bearer for HE in Nigeria and even beyond. UI would be embarrassed by failure. If it makes good progress with the ETI, it will be a very good showcase. They would also be a multiplier effect, because of UI's role in supplying academic staff to other HE institutions.

At the micro level, there is nothing that particularly concerns me. As usual, M&E will need support and capacity-building, but that should not be insuperable.

# Report on visit by Patrick Spaven, External Evaluator of the PHEA-Educational Technology Initiative (ETI), to University of Makerere (MAK) 6-9 October 2009

The visit was the fourth in an initial series of visits by me to the seven universities in the PHEA-ETI.

My timetable consisted of the following elements:

- Several meetings with Tito Okomu, Head of eLearning and coordinator of the ETI at MAK.
- Two meetings with Dr Jessica Aguti, Director of the Institute for Adult and Continuing Education (IACE).
- A half day workshop on M&E for the ETI primarily for members of the project teams (6 participants, including the two members of the eLearning unit. This included a facilitated group discussion about the Part A process and ETI in general.
- Separate meetings with members of each of the three project teams.
- Meetings with the Deputy Bursar, Deputy Head of Procurement, Director of Planning and Development, Deputy Director Post Graduate School.
- A discussion with Abigail Inapat, the member of eLearning unit developing the Moodle LMS.
- A tour of ICT facilities and a meeting with Apolo Kyeyune, Planning and Maintenance Manager Directorate for ICT Support (DICTS).

It was not possible to meet any other members of university top management as they were involved in a week-long process of re-selection for 7 of the top 10 posts, including the VC's.

## The Part A process

I visited Makerere a year after the first Part A visit. The submission was not yet complete. This was the longest gestation period of any of the participating institutions and the process has not trouble-free. It is likely that the long process of developing the submission, with its many iterations, has led to a falling away of interest, particularly from members of the original interest group at MAK whose project proposals did not make it to the final straight.

On the positive side, those who remain interested see tangible benefits in the proposed projects. The timing of the Initiative is strategically opportune, as the university has committed itself in its new Strategic Plan to developing learner-centred approaches to education after some disappointments with eLearning initiatives earlier in the decade. There is also a renewed emphasis on increasing access.

The team said that the first visit had been a wake-up call about the need to find a new LMS solution. This had led to the introduction of Moodle, despite some procurement difficulties, which seems to be progressing well.

Although there has been no appreciable interaction yet with the other six institutions – except at eLearning Africa - the participants are looking forward to that aspect of the ETI. They think it would be good to promote interaction on the ETI website.

# The ETS

The draft MAK ETS needs attention in some respects. [By the time of writing the Part A evaluation, they have been addressed]

What happens to the completed ETS is another question. It may be best not to mobilise it until there is stable leadership at MAK, and the projects are beginning to achieve traction.

# The project proposals

## <u>eContent</u>

The eContent project looks too ambitious in scope, even if conditions were perfect. The team has already realised this and said they will present a scaled down version at the next iteration of the ETS, with 8 instead of 20 faculty participants. They have some broad criteria for selecting courses, but will refine them once the proposal gets the go-ahead.

I pointed out the importance of evaluating the user (both staff and student) experience of the eContent. The team took this on board and will plan for it and adjust the timetable.

## Research on gender and ET

This will be part of a batch of research on ICT-related themes to be – or currently being – conducted by the Department of Women and Gender Studies (WGS). The Director, Consolata Kabonesa, will lead the project.

It is a straightforward piece of research which will be completed in about 9 months. Its value will be increased if the dissemination of its results, and possibly also the development of its methodology, is harmonised with the other WGS research mentioned above, and with similar research at other institutions in the ETI.

# ePortfolios

This project, in contrast with eContent seems to be mushrooming in scope. It was originally focused on students doing community-based fieldwork in Health Sciences. Part of the rationale for the ePortfolios was that they would make it easier for staff to supervise and assess their work.

The project then broadened to include students in other faculties who would not be working remotely. There is still a good pedagogic ground for introducing the portfolios, but it shifts the centre of gravity of the project somewhat.

Now the team are proposing to include ePortfolios for staff in the project with a view to including them as a standard tool in performance assessment. Hence the inclusion of Human Resources in the proposal. I think this should be discouraged as it could make the project unwieldy.

The proposal aims to contribute to an institutional policy on ePortfolios. There has been little thinking to date on how this would be achieved.

There are broad references to M&E. More work will have to be done this. I pointed out a significant timetable correction that will be necessary to allow for evaluation of the use of the portfolios.

The project will be led by Andrew Mwanika from the Faculty of Medicine who has a thorough understanding of ePortfolios from postgraduate work he undertook at Maastricht.

The Dean of Medicine attended part of the meeting I had with the team.

# The institutional environment

#### Procurement

All procurement is coordinated by the Procurement and Disposals Unit (PDU) which reports to the University Secretary. It is bound by the Public Procurement and Disposal of Public Assets Act (PPDPAA) 2003. The Act specifies the processes that must be followed for each expenditure level. The same rules apply to consultancies as goods and other services. The threshold for multiple quotations is \$1200. More complicated bidding processes operate above \$15000. Some of these are said to take well over 6 months.

Even the multiple quotation level can be slow and problematic. The information must go first to an Evaluation Committee which reports to PDU. PDU's recommendations must then be endorsed by a Contracts Committee. PDU is reluctant to recognize that with some types of specialized service or goods (software for example) it is impracticable to get three quotations. There is a clause for exceptional direct procurement, but it is said to be very difficult to trigger.

There seem to be three routes around the problems with procurement. One is for the local ETI team to see how much flexibility can be negotiated informally.

Another is to insert a clause in the MOA that time-sensitive procurement – specifically consultants and software – should be exempt from the standard procedures. The Director of Planning said that this is legitimate and would work.

The third is the suggestion already made that these aspects of procurement are done directly by SAIDE-CET team with ETI funds that are retained by them. This would seem to be acceptable as long as the choice of consultants and software is a joint decision with MAK.

I don't think the first route is likely to succeed at present. I don't see any reason not to adopt the third route with the second as a back-up

#### Management and Governance of the ETI

The ETI core team of four that was identified during the first visit in practice has shrunk to two: Tito Okomu – who is in line to be the programme coordinator - and Jessica Aguti. The wider ETI "community" has also largely disengaged. 6 people attended my M&E workshop.

Part of the problem may be the fragile organisational position of the eLearning Unit. It is very small, not very visible, and somewhat ambiguously located within IACE. But no progress has been made with the proposal for an ET Unit in the draft ETS. Without a strong organisational base for eLearning, the ETI at MAK needs broad, effective and influential leadership. At least one more senior member of staff should be involved, in addition to the project teams.

There must also be effective, engaged governance. Nothing is in place at present. The Director of Planning is the obvious candidate to lead the governance of the ETI. Planning has responsibility for the performance of externally funded projects unless they are in research (in which case, as I understand it, oversight is with the Post Graduate Studies). The Director of Planning invariably delegates the day to day monitoring of these projects to a member of his staff, but could be persuaded to maintain close involvement through a tight oversight regime. Planning in turn reports to a subcommittee of Council, so has incentives to ensure projects remain on track.

#### **Diffusion of ET4TL**

MAK has had a mixed history of involvement in ET. Along with the other East African institutions in the ETI, it was a base for an African Virtual University (AVU) centre in the late 1990s and early 2000s. The AVU introduced Blackboard to the campus and with it, MAK's first experience of running a course online (a joint course in international relations provided by Tufts University, and shared with UDSM). Staff were trained in the use of Blackboard, and many uploaded teaching material. When the AVU centre closed, there

was a hiatus because there was no strategy for taking ET forward and for ownership of Blackboard. The Department of Computer Sciences took over the platform for their own courses. Eventually DICTS was asked to take it over on behalf of the university as a whole.

Some capacity development has taken place, but always, it seems, at the behest of donors. NUFFIC trained 30 staff in eLearning in the Netherlands in 2002, but little came of it. For some reason, few of the trainees were academic staff. Carnegie has funded training for eLearning more recently. Some was specifically for the Women and Gender Studies Department – and this seems to have born fruit in the department's active involvement in the ETI and parallel ET and ICT projects. The eLearning Unit has also been funded by Carnegie to conduct an intensive series of training in recent months. About 390 staff have participated so far. This training is a response to anxieties by Carnegie about momentum in capacity development in this area.

It cannot be said that there is mass engagement\_in ET by staff at MAK. The eLearning committees and coordinators which were mentioned in MAK's initial questionnaire do not function. There are pockets of active interest and capacity, and what is said to be a consensus around the need to integrate ET into teaching and learning and the political will to mobilize it. But this doesn't amount to the developing momentum the ETI would ideally be looking to harness. It will need to work hard to generate its own momentum, and focus political will.

A more promising indicator is the degree of involvement by students. 6000 have already registered on Moodle. That is not as high as the figure of over 34,000 claimed for Blackboard, but it is early days, What needs to be clarified is what these figures mean in practice. If registration is a requirement to access key information, how many of these go on to more active use of Moodle?

Students are now required to pay an ICT fee of about \$25 p.a. There are already signs that this is stoking the demand for better facilities.

The 2008/09 to 2018/19 Strategic Plan gives prominent roles to the development of learner-centredness in, and enhanced access to, teaching and learning; outcomes which would be supported by the ETI. The Plan is an excellent document on paper. However, it is not easy to see what is currently driving MAK towards these outcomes and where accountability lies if it is not achieved.

### ICT infrastructure

MAK is in the final year of an 8 year ICT Master Plan. Considerable progress has been made and the inventory of developments in the ETI Submission appears to reflect that progress quite accurately. In common with the other East African capital city-based universities, MAK is on the threshold of benefiting, in bandwidth cost terms, from the arrival of the Seacom cable.

A few qualifications need to be made to the picture presented by the inventory. Computer access for students, and even staff, on campus is unevenly distributed. Most facilities are faculty-based and restricted to student and staff members of the faculty. In some faculties, such as Computer Science, the student-computer ratio is as good as 2 to 1. In others it can be worse than 20 to 1. How many of these computers are out of commission at any time is not known, but as many computers are ageing, it is likely to be a significant number.

The Planning and Maintenance Manager at DICTS estimates that about 20% of students have their own computers – mainly laptops. At present there are restricted opportunities

to connect them to the internet on campus, but there are plans to increase the number of hotspots.

Power does not seem to be a serious problem. There are occasional outages but the essential equipment is covered by back up.

Much of the infrastructure and equipment has been funded by SIDA. Their continued support may be contingent on university reforms. This is no bad thing. But if MAK fails to achieve those reforms, funding for maintenance and further development of ICT may become a bigger issue.

#### Institutional leadership

MAK has been suffering from turbulence in its leadership. At the time of my visit 7 out of the university's 10 top posts were up for re-appointment. The VC for the last 5 years, Livingstone Luboobi, left office in May. His term was marred by allegations of mismanagement that provoked several strikes by lecturers and students. He has recently been replaced by an acting VC, Prof. Venansius Baryamureeba, the former Dean of the Faculty of Computing and Information Technology. There will be a new appointment process in about six months.

SIDA is making its continued support contingent on major institutional reforms. A MAK committee is due to report in about 18 months with proposals for change.

These are not ideal conditions for the securing of top management commitment to a new programme like the ETI. Moreover there is no evidence of an empowered, cohesive layer of management beneath the top posts. MAK does not seem to have a culture of empowerment. There seem to be no strong unifying forces at present.

# Monitoring and evaluation

The workshop on M&E was poorly attended. The level of understanding and interaction was not high. Tito is planning to get feedback – quantitative and qualitative - through Moodle. This will make an important contribution, but it is only part of the picture.

The Planning department has invested in M&E training for its own staff, who therefore should be able to offer guidance on M&E and not simply ensure compliance.

#### Conclusions

The ETI at MAK carries a risk of under-performance. This is due chiefly to:

- An under-resourced ETI management team.
- Distracted institutional leadership.
- Currently no obvious powerful champions for the ETI.
- Rigid and long-winded standard procurement procedures.

There is however a supportive strategic plan at the institution level reflecting real need for interventions like the ETI. The ETI projects have the potential to make significant contributions.

Each of the risk factors should be addressed. The first steps should be to:

- Strengthen the team and put an engaged governance structure in place.
- Find a way round the procurement obstacles.

A little further down the line, the team should be supported in developing and implementing an advocacy strategy. M&E will also need support.

# Report on Visit by Patrick Spaven, External Evaluator of the PHEA-Educational Technology Initiative (ETI), to University of Dar es Salaam (UDSM) 12-14 October 2009

The visit was the fifth in an initial series of evaluation visits to the seven universities in the PHEA-ETI.

My timetable consisted of the following elements:

- Brief meeting with Dr H Twaakyondo, Director Centre for Virtual Learning (CVL) (Dr Twaakyondo left for a meeting in Nairobi after 10 minutes. He was away for the rest of my visit)
- Meeting with Prof Ikingura Dean School of ICT (SICT)
- Separate meetings with members of each of the two project teams.
- Further discussions with members of CVL, especially Joel Mtebe and Mulembwa Munaku, the two project leaders.
- A half day workshop on M&E for the ETI primarily for members of the project teams. This included a facilitated group discussion about the Part A process and ETI in general.
- Meeting with the DVC Academic, Dr Makenya Maboko
- Meeting with Baraka Mbughi, Deputy Head of Procurement Bursar
- Meeting with Dr Respickius Casmir, Deputy Managing Director, UDSM Computing Centre.

# The Part A process

In the group discussion at UDSM, there was some criticism of the Part A process, and the ETI in general. This stems partly from unmet expectations about what could be covered by the ETI. But it also reflects a willingness among this group to be open and forthright - which I think is a positive factor.

The group had positive things to say about the ETI and the Part A process. They said that the first visit had consolidated internal support for integrating educational technology (ET) in teaching and learning. They praised the facilitation skills of the consultants.

Some of them said they found the focus on research "useful" and helped them to understand that all projects could produce new learning through research and evaluation.

The UDSM team were the most positive of any so far about the ETS which they said had not been hard to complete and had been a useful as a type of SWOT analysis on the status of ET at UDSM. They were confident that it would be useful beyond the scope and life of the ETI.

Some had also found the ETI website useful for accessing materials, but they felt it could have been developed to include a mediated forum and blogs. This would have helped the CVL members in particular break out of their relative isolation.

Several other criticisms surfaced:

- They had found the iterative process very demanding, although they acknowledged they had had a long road to travel and that there was probably no alternative to this approach.
- They were disappointed at the narrowing down to two projects. They felt that others were viable and should have been funded. They recognised that the budget was fully committed but felt that more funding should have been made available for what they saw as good project proposals.
- There was a general feeling that the inclusion of a technical specialist in the team would have been valuable.

- They had the impression that the ETI could not fund any software or equipment.
- There were some criticisms of the MOA which was thought to be over-complex and legalistic.

There are clearly some lingering issues that will need to be addressed by SAIDE-CET as the programme moves forward. But despite these criticisms, the predominant atmosphere among the group is positive and they clearly enjoyed the engagement with the SAIDE-CET team. They are impatient to get moving. Considerable momentum – even excitement - has been generated by the Part A process.

# The ETS

The draft ETS looks well structured with ample relevant content. The ETI logical framework is as good as any I have seen with outcomes that all flow logically from the project outputs.

It is not clear where the team will take the ETS once the programme begins. But the DVC Academic is aware of it and seems to be keen to make full use of the ETI. So I would have no immediate concerns on this score.

## Online course migration and improvement

The intention is to focus on approximately half of the existing course structures on Blackboard – it is thought that the other half exist only as course titles. The project proposal seems to suggest that these 200-odd courses will be migrated to Blackboard; and that five of them will be chosen for extensive redesign, following training of the academic staff members concerned.

In discussion it emerged that very few courses are suitable for migration intact to Moodle. The team talked about de-constructing the courses and only moving the parts that are fit for purpose. This seems sensible, but it will require agreement on selection criteria and rigour in applying them. It will also require careful handling of the academic staff whose work is rejected. This may be a difficult a task for the yCVL team. It seems to me that the whole migration process needs to be re-assessed, and a workable strategy agreed, once the proposed audit of existing courses is completed.

The team thought that the five chosen courses will be designed more or less anew, rather than re-engineered. That would probably not materially affect the project resourcing or schedule.

Overall, this project, if it goes well, will make valuable contributions in particular by:

- Establishing Moodle as the likely LMS of choice a more sustainable solution than Blackboard. Apparently, UDSM will continue to hedge their bets for a while by retaining KEWL as an alternative. They should evaluate the two options as soon as they have enough data. This makes M&E of the Moodle project particularly important.
- Raising the profile of CVL. CVL needs a bigger footprint at UDSM to enable its talented staff to realise their potential.
- Creating a small core of academic staff with instructional design competencies and practical experience, who can then act as champions and multipliers.

It is however a high risk project, and under-performance could be damaging to the university's ambitions to move forward quickly with the harnessing of ET for "independent learning".

#### Computer science interactive courses

This project seems to be well thought-out and designed. It is also a practical test-bed for the application of interactive course material. Computer science courses will benefit more than most from this approach. They are also in CVL's "back yard" and the process should be easier and the partners more tolerant of difficulties that may arise.

In the evaluation of the project, however, it should be recognised that replicability to other areas may not be straightforward.

# Institutional environment

#### Procurement and approvals

All Procurement is coordinated by the Procurement Management Unit. It is bound by the Public Procurement Act 2004. The Act specifies the processes that must be followed for each expenditure level. The threshold for procurement that must be submitted to the Tender Board is \$3000. The same rules apply to consultancies as to goods and other services. Expressions of interest would have to be invited, followed by selection through an evaluation panel and approval by the Tender Board. Single source procurement is possible but approval for that can also be very slow and uncertain. Usually it is only approved for repeat orders from a proven source. Consultancy from a source that was previously given free as part a donor intervention can even be barred.

Like Makerere, UDSM allows donor agreements to override the normal rules. The MOA would be the appropriate vehicle for fast tracking. Alternatively – or as well - consultants could be procured directly by SAIDE.

Approvals for expenditure, whether or not they are put into the procurement evaluation pipeline, are given in the line. This can also be slow if the approval level is high. This depends where the project account is held. We discussed this with the Dean. He recommends that the account be held by CVL. That way approval would be sought from his post which would be responsive. Another advantage is that CVL has a forex facility which would speed up release of funds.

UDSM does not have any special unit that monitors and troubleshoots externally-funded projects.

### Management and Governance of the ETI

The proposed management and governance of the ETI has the virtue of simplicity. Deputies are included to allow for absences of key players such as Dean SICT and the project coordinators.

My concern is that the structure is too narrowly concentrated on CVL and SICT. It would be good to introduce some outside blood to both the Coordination Committee and Implementation Teams.

The status of CVL could be higher and its role clearer. It occupies an ambiguous position inside SICT. However, with nearly 20 staff, it has more potential visibility than some of its counterparts at other participating institutions.

#### ET's journey and current status

UDSM acquired the Blackboard LMS in 1998 through the Technology Enhanced Independent Learning (TEIL) project with funding from the Flemish University Council. By 2003, when the project ceased, there were said to be nearly 700 courses on the platform. 4660 students had registered. As there had been no training in instructional design, most of the material was simply course notes and background reading. A member of the Law Faculty, which had been chosen to pioneer the use of Blackboard, reported that "teaching at the Faculty of Law is still based on the conventional teacher-in front of students-in-lecture rooms".

In 1997, the African Virtual University (AVU) set up its node at UDSM 1997 on a pilot basis and expanded it in 1999. It began by offering a few short courses online, but inadequate equipment hampered their effectiveness. The satellite dish was receive-only, so interactivity took place through e-mail, telephone and fax. The improving ICT infrastructure at UDSM, funded mainly by SIDA, enabled the AVU to offer online courses at degree and diploma levels in computer science and business studies delivered by two Australian universities; but these are said not to be a great success, and are not a permanent solution.

In an attempt to harness the opportunities offered by ET, Carnegie helped UDSM set up an Instructional Technology Resource Unit. It provided extensive training in the use of Blackboard and intensive training for 10 people in instructional design. They were intended to train others. This was also said not to have worked well. It would be useful to find out why. A member of the ETI team described the use of Blackboard as "dormant" in a presentation in 2007; and the university ceased to subscribe the same year.

About three years ago, the AVU and ITRU were replaced by the Centre for Virtual Learning which became part of the Computer Science Faculty. This is now known as SICT.

On the face of it, this is not a very encouraging context for a new ET initiative. There is a degree of "initiative fatigue" with this series of underperforming interventions. Few academic staff at UDSM are thought to be eager to embrace effective eLearning. However, there are some positive indicators:

- The University is developing an eLearning policy.
- There is said to be growing demand among students for blended learning.
- UDSM has adopted the Moodle platform.

Furthermore, the University has committed itself to a major expansion of distance education and the assumption is that much of this will be ICT-mediated. Carnegie is funding pilot on-line courses – PG Diplomas in Education and Engineering Management - aimed at distance students, These were launched on Moodle in April 2009. An undergraduate programme in commerce (Bachelor of Business Administration) will be implemented in 2010; and there is a plan to introduce an on-line LLB. The World Bank is supporting the establishment of regional UDSM ODeL centres, the first one – in Mwanza – is already open.

#### ICT infrastructure, capacity and usage

In contrast with the narrative of ET4TL, ICT has a history of progressive improvement. Tanzania has lagged behind most other countries in the region in ICT, but is making a determined effort to catch up. This is true of many of her public institutions including UDSM.

The VC in 1998 had a strong belief in ICT and was responsible for detaching the universities computer services from the Computer Sciences Faculty and converting it to a private company (wholly owned by the university): UCC Ltd. This enabled it to focus on ICT services, gave it valuable interaction with enterprises beyond the campus, and enabled it to pay competitive remuneration to attract and retain staff. A possible

downside is that it is distracted by the work it does for outside clients which now far outweighs the internal services it provides to UDSM.

Much of the funding for ICT infrastructure in recent years has come from donors – particularly SIDA - but this hasn't prevented UDSM from planning effectively. The Deputy MD of the UCC is also the VC's personal ICT adviser and strategist.

Bandwidth is improving. UDSM is negotiating a favourable contract to use the Seacom source which will upgrade the university's fibre optic backbone from 100Mb/s to 155Mb/s. In about a year, UDSM's regional centres will be linked by fibre optics through the nation's extending backbone (they are currently linked through VSAT)

The availability of 24/7 wireless hotspots is encouraging students to acquire laptops. Casmir estimates that between 20-30% now own laptops and the university is piloting a scheme to make cheap laptops available through loans. Faculty computer labs and the library are not so well served by desk tops. Numbers are inadequate and about 50% are out of commission at any one time. For staff the position is much better.

The university has a comprehensive array of management information systems.

The University is the secretariat to, and is spearheading, the Tanzania Education Network (TENET).

#### Institutional strategy and leadership

As reported in the Submission, UDSM has a Strategic Plan which has objectives of increasing access to, and quality of, teaching and learning including curriculum design and delivery strategies. There was good awareness of these objectives among the people I met.

UDSM seems to have stable institutional leadership. I had no way of gauging the interest and commitment of the VC to the ETI; but the DVC seemed to appreciate it. Given that it has the potential to support the high political priority of expanding distance education, it is unlikely that senior management would want it to falter through neglect.

# Monitoring and evaluation

The workshop did not give me many insights into the state of readiness of the teams for the M&E of the programme. I suspect that understanding is quite low and that support will be needed, particularly with the summative evaluation of the projects.

# Conclusions

I experienced a well-organised programme. I was impressed by the enthusiasm of the team, by the engagement of the Dean of SICT, and by the enterprising nature of UCC Ltd. The ETI group at UDSM seem to have come a long way during the Part A process.

I was impressed by the draft submission and its degree of focus. This has clearly involved strong steering by the SAIDE-CET team.

Long-term progress and sustainability is less clear. UDSM is more dependent on outside funding than any institution visited so far. If the university doesn't find more stable funding streams, I am not optimistic about the longer-term progress and sustainability of the application of ET. But the experience with UCC Ltd shows that UDSM can innovate to find new business models.

# Report on Visit by Patrick Spaven, External Evaluator of the PHEA-Educational Technology Initiative (ETI), to Kenyatta University (KU) 15-19 October 2009

The visit was the sixth in an initial series of evaluation visits to the seven universities in the PHEA-ETI.

My timetable consisted of the following elements:

- Meetings with Dr Speranza Ndege, Director Institute for Open, Distance and eLearning (IODeL).
- Meeting with Prof Mugendi, DVC (Finance, Planning and Development) as Acting VC (the VC was unexpectedly out of the country)
- Meeting with members of the ETI Evaluation and Monitoring Committee
- Follow-up meeting with Prof Gravenir, Director University Advancement
- Meeting with Dr Karimi, Deputy Director IODeL
- A workshop on M&E for the ETI for leaders of the project teams and some members of the Project Monitoring Committee. This included a facilitated group discussion about the Part A process and ETI in general.
- Meeting with Tirus Mburu, Procurement Officer.

## Part A process

KU was the last institution to be visited by SAIDE-CET. The Part A process at KU involved two visits. The fluency of interaction during those visits and the progress made are well documented. The feedback from the participants I met confirms what has been recorded. They found the process very effective in helping them to appreciate how the ETI meshed with their strategic objectives for educational technology (ET), and to formulate projects. As the ETI First Annual Report suggests, the progress made was due mainly to KU's highly engaged response to the information and facilitation provided by the SAIDE-CET team. Despite being the last of the seven institutions to begin the Part A process, KU were the first to complete their submission.

There was a suggestion that the ETI website should be made more interactive as soon as possible. There was also a feeling that there should be an ETI network-only zone where certain documents would not be accessible by the general public.

#### The ETS

The Draft Submission and ETS for KU are one and the same. The document includes key excerpts from the University's Strategic and Vision Plan and the eLearning Policy. The ETS is therefore a more comprehensive document than any I have seen. Because the VC is engaged with the ETI at KU, it is likely that the ETS will be rapidly institutionalised.

The "Submission Logical Framework" follows the project proposals at the Output level. There is a line of sight from the projects to most of the "Long-Term Outcomes", but several of these outcomes are not well-framed, particularly for M&E purposes. Some are activities and not outcomes; some are rather abstract; several contain too many components. As a batch, they try to do too much. I think it would be better to identify a smaller number of coherent, evaluable outcomes.

Project 1: Digitization of Past Examination Papers

This project seems to present few difficulties and should produce solid benefits. It will be important to evaluate the benefits - outcomes such as improved access for customers and staff and space savings for the Library – to demonstrate the return on investment. This could serve as a model for other institutions in a similar position. Improved access would have to be mainly impressionistic, unless baseline data on current usage is captured. There is none at present.

Project 2: Postgraduate Research Methods Course

This project will lead to a totally new cross-cutting course in research methods. Whether on- or off-line, this would make a significant contribution to scholarship at KU. The online dimension will potentially offer quality and access benefits, as well as efficiency savings through use of OERs.

There will be the potential for a semi-controlled impact evaluation in that existing sectorspecific courses will continue to be run off-line alongside it for a while. Results for both types of courses could be evaluated and compared, with allowances for the differences in their content and orientation.

Project 3: Online Executive Master's Programme in Business Administration

This is an ambitious project with great potential for contributing to economic development in Kenya and the wider region through improved leadership. There is strong commitment in the team to make it work.

There are risks that the project is too ambitious; and also that the course will be too demanding – particularly in time requirements – for many busy senior managers, and, without the reinforcement of fact to face support, they may slip behind.

To address the first risk, the project team have revised their plan somewhat since the submission was completed. There will now be an off-line version of the course launched in January 2010 which will serve as a pilot for the curriculum. This will be followed by a progressive roll out of the on-line version.

Monitoring and evaluation of activities and of results – including the numbers failing to keep pace or complete - will be important as the piloting and rollout progresses. There are bound to be lessons that should lead to improvement and also to a better understanding of whether this type of course can work at all in this context.

Project 4: Creation of Chemistry and Communication Skills E-Learning Modules

This project is in effect a pilot for the mainstreaming of blended teaching and learning at KU – an objective in KU's Strategic and Vision Plan. Although academic staff are beginning to post their material on Moodle, they are not fully exploiting the interactivity and learner-centredness that this medium offers.

The project will be a significant step in that direction by building capacity and providing hands-on experience that should be carefully evaluated before further roll-out.

I queried some aspects of the activity schedule – such as the reference to "pre-test" at point 3; and the apparent overlap between points 4 and 10. The team will review the schedule and make any necessary revisions.

Project 5: Executive Information System Specification

The compliance of this project with the criterion for direct relevance for teaching and learning has already been discussed by others.

My main concern is that it may turn out not to be practical. The project aims to create a common interface for several databases with different data standards. My understanding and experience suggests that this is often very difficult and costly. It doesn't help that the Enterprise Resource Planning System recently adopted for student information is said to be problematic.

The project, as currently presented, is a low-cost feasibility study. As such, there is not much risk in going ahead. However, KU will have to have a very cool head in discussions with potential suppliers of the system. Suppliers have a tendency to paint an over-optimistic picture of the path forward. I would strongly advise them to seek independent outside expertise in assessing the options.

# Project 6: Digitization of Theses and Dissertations

On the face of it, this project seems eminently sensible and has potential synergies with the exam papers project. The "time and motion" pilot will test the practicability of the proposal. There may turn out to be a problem in releasing the pages from the glued binding that most past theses used. There is a chance that residues of the binding may inhibit the use of the sheet-feed scanner. The alternative – a flat-bed scanner – would be a very time and labour-consuming process.

If the process is slower than hoped, strict prioritisation of past theses for digitisation will be even more important. There is an argument in any case for restricting the digitisation of Masters' dissertations to the last few years, as scholarship at this level tends to become obsolescent quite quickly.

## Monitoring and evaluation (M&E)

The Strategic and Vision Plan shows that KU is an institution that takes M&E seriously. This appears to be a relatively new phenomenon, and expertise has probably not yet been mainstreamed. Discussions with each of the project teams helped to move their thinking forward, particularly in terms of the definition and evaluation of outcomes. More support will be needed as the projects move forward.

#### Management and Governance of the ETI

The ETI will be coordinated by Dr Ndege who is also the secretary of the governing "Evaluation and Monitoring Committee". The VC is Chair of the Committee, and is also a member of one of the project teams (PG Research Methods Course).

The project teams seem sound and committed. All but one of the projects are led by a Dean or Associate Dean.

#### Institutional environment

#### Institutional strategy and leadership

KU has a Strategic and Vision Plan for the period 2005-2015. It was revised in 2008 to align it with the Kenya Government's Vision 2030 which was launched the same year. The Plan is the most comprehensive I have seen in any of the institutions visited so far. Every strategic objective has accompanying strategies, time-bound activities and performance indicators presented in modified logframe format. Every indicator has a clear location of accountability. It is a very impressive document. Baseline data has been captured for all indicators, and M&E processes are being put in place to track them.

Two of the 10 Goals in the Strategic Plan – promoting high standards in teaching and learning, and enhancing access - are directly served by the effective application of ET. Several of the others – e.g. the institutionalisation of ICT and the promotion of research innovation – are potentially complemented by it. The strategic logical framework for the Academic Programmes sector contain commitments to:

- Training more academic staff on the use of modern learning technologies (no target)
- Converting programmes to eLearning mode (80% by June 2012)

The ICT sector of the Plan commits KU (with associated indicators, but no targets) to:

- Adapt curricula into eLearning mode
- Mount eLearning programmes
- Offer courses through eLearning mode
- Facilitate staff training in ICT
- Expand on-line programmes

These two sets of activities overlap. The locations of accountability are not identical in the two sectors.

There is also a commitment to reform the reward system to recognise exemplary performance and achievement. Although it is not spelt out, I suspect this signifies a break from the traditional reward system based on research publication.

Plans are not much use without a leadership which is determined and resourced to carry them out. KU seems to have that too. Prof Olive Mugenda has been VC since March 2006. She is credited by the people I met with the giant steps that KU has taken in the last three years or so. New infrastructure and systems have been put in place and the senior staff around her are highly motivated to achieve their goals. KU achieved ISO 9001: 2000 certification in May 2008. It has also won top place for the last two years in the State Corporation category of the Kenya Government Performance Contracts league table. There are 130 institutions in this category including all public universities.

To resource the ambitious changes she is driving, the VC has won a recurrent increase in government funding, said to signify the rectifying of an historic "injustice" in the public university funding formula. She has also generated funds internally by cutting costs. KU's new strapline includes the word "Self-Reliance". KU intends to be less reliant on donor funding than many of its peer institutions.

## ET's journey and current status

ET's journey at KU is well documented in the ETS/Submission. Two things are worth emphasizing from this.

- KU has had a relatively successful experience with the AVU, unlike some of KU's counterparts.
- The development of ET at KU outside the AVU context is relatively new and is not scarred by the experience of underperforming donor-funded interventions.
- KU quickly switched from Blackboard to Moodle, once they saw the advantages of the latter (this apparently stemmed from the 2007 eLearning Africa conference). This meant that few people had a strong stake in Blackboard.

All these factors augur well for the ETI's contribution. Momentum is ready to be harnessed.

Most of the early momentum in ET is aimed at increasing access. The IODeL is planning to have 10 Distance Education courses re-engineered for on-line delivery by January 2010, and another 32 in the near future. 3 staff "champions" from each department (210 staff in all) will shortly be put through a 40 hour intensive course in instructional design (commandeering part of the 600 seater student computer lab for the purpose). The aim is for them to work with technical staff in the IODeL who have been trained in the software that will structure the material for use on the LMS.

Staff will continue to load material on Moodle for campus-based blended learning, but this area will not be "cleaned up" for some time. This makes the ETI Chemistry and Communications Skills project something of an in-house pioneer in the blended learning area.

It seems to me at first sight that there are potential missed opportunities in creating separate ET tracks for distance and for blended learning. This may reflect the newness of the merger of the eLearning Coordinating Centre with the IOL. Hopefully, they will soon exploit the benefits of convergence of the two tracks.

## ICT infrastructure, equipment, capacity and usage

ICT infrastructure and equipment has been rapidly improving from a low base. KU connects its campuses and the buildings within each through a combination of fibre-optic cables and satellite. It has not yet created connections with 8 of its 9 provincial centres. The cost of bandwidth in Kenya, as in other East Africa countries, is falling rapidly, thanks mainly to the arrival of the Seacom cable.

KU has rapidly increased the number of terminals available for students. While older equipment suffers a typical 50% out of commission ratio, there are hundreds of newly installed computers, purchased at an advantageous price from Dell through shrewd negotiation. KU's main campus has a 600 seat student computer lab. It is not open at weekends or in the evenings. The Library computer lab however is open till 10pm. The Library and the former AVU Centre are at present the only free wireless hotspots, but there are plans to create them in student hostels. The Kenya Government has just announced a scheme to provide subsidized laptops to university students.

ICT training for staff and students is comprehensive.

KU's greatest challenge in ICT may be retaining technically qualified staff. There is high turnover among lab technicians; and the university has been without a substantive Director of ICT for some months, having failed to attract a suitable candidate through outside recruitment. A re-advertisement appeared the week I was there. There are more opportunities for qualified ICT staff in Nairobi than any other city in the region, and KU's standard pay scales are uncompetitive in this area. They may need to consider a solution like the one at UDSM: privatization of ICT services..

#### Procurement and approvals

Procurement at KU is governed by the 2005 Public Procurement and Disposals Act and its Regulations in force from 2007. This has similar provisions to its equivalents in Uganda and Tanzania, which became law about the same time.

Unlike MAK and UDSM, KU appears to have no problem reconciling these regulations with rapid and sensitive processing of procurement requests. As long as requests are well argued and evidenced, I was assured that the type of procurement envisaged for the ETI would pass through the evaluation and approval stages in 3-6 weeks. Although expressions of interest must normally be invited from several consultants, if only one responds he/she can be appointed, as long as they meet the criteria.

KU's procurement processes add, rather than destroy value, because apex management has got a grip on them. The processes are supported by KU's commitment to ISO 9001: 2000 certification. I do not therefore see the need for special measures at KU such as direct procurement by SAIDE.

## Conclusion

KU is an exceptional institution in many ways. I can find no significant reason why that exceptionality should not work for the effective deployment of the ETI at KU.

# Report on Visit by Patrick Spaven, External Evaluator of the PHEA-Educational Technology Initiative (ETI), to the Catholic University of Mozambique (UCM) 15-18 February 2010

The visit was the last in an initial series of evaluation visits to the seven universities in the PHEA-ETI. It had been scheduled for November but had to be postponed for personal reasons.

My timetable consisted of the following elements:

- Meeting with Father Ponzi, Acting Rector (the Rector is on 3 months sabbatical in the USA) and Dr Alfandega Manjoro, Dean Faculty of Economics and Management (and Chair of ICT Committee)
- Separate meetings with Dr Conrad Steidel (Health Sciences), Sam Kusangaya (Geographical Information Systems etc) and Ernesto Kombo (Distance Education) to discuss the ETI projects they are coordinating.
- A workshop on M&E for the ETI for leaders of the project teams and members of the ETI Overall Committee.
- A series of meetings with Wisdom Machacha (ETI Coordinator) and other members of the Overall Committee - Dr Ngoni Murimba (Director ICT), Gerald Henzinger (ELearning Coordinator), Mr Tendayi Madziya (Head Librarian) and Brighton Vaz (Lecturer in Faculty of Economics and Management) - to discuss the other two projects and wider issues.

# Part A process

UCM had its two formal Part A visits in December 2008 and February 2009. The submission for Part B was approved in March 2010. This is the longest gestation period of any of the ETI institutions.

The Part B submission was submitted to PHEA in early November, so over four months of this time has been spent in negotiation with the funders. The last phase of this was a referral by PHEA to an external assessor. Although this was described as normal practice for the funders, it was only applied to two of the ETI institutions: UCM and Jos. The reason these institutions were chosen are not entirely clear, but the effect on UCM has not been positive. In particular they are dismayed by a number of misconceptions that are evident in the assessor's report. I have seen the report, and while it makes some valid points, particularly about the need for more focus in the Centre for Distance Education project, these are overshadowed by the misconceptions. These misconceptions stem largely if not wholly from the lack of contact between the assessor and anyone in or involved with UCM.

Despite the delays, UCM are generally positive about the Part A process. They feel a strong sense of ownership of the submission. In particular, they seem to have stronger ownership of their ETS than any other institution, mainly because they see it as a development from their own embryo ICT strategy. The UCM ETS is an inclusive document, scoping wider and longer-term than the ETI.

The facilitation process established rapport from the start and has been very constructive. They are the only institution to mention eLearning Africa Dakar – unprompted – as a useful experience, one they said, that convinced them to go ahead with ET development and not wait for the ETI funding to be released. It also led to some informal contact with MAK and Jos.

UCM reported that Part A provided them with experience of

- project planning
- funding bid proposal writing
- transversal collaborative working.

They said that this was probably the most inclusive and unifying programme the university has ever had. They believe it is already having concrete results. In the ET workshop they conducted in August, there was strong anecdotal evidence of increased awareness of, and buy-in to, ET among academic staff.

UCM's opinions on the ETI website, are similar to those elsewhere. They have downloaded useful resources from it and the wider OERAfrica site, but would have liked one or two communication tools such as a list server and live chat. They would like to see this type of tool available in Part B.

# The Submission – Background and ETS sections

The Background and ETS Sections of the Draft Submission are the most informative of any of the seven institutions' products. There is an ICT and ET-oriented SCOT(SWOT) analysis conducted by the university in 2008; and the opening section of the ETS reports the current status of institutional assets - such as ICT and staff capacity – and goes on to propose the optimal future direction for each asset.

The ETS Logical Framework is comprehensive and inclusive at the outcome level. It includes results such as centralised administrative systems, which are not covered by the ETI. Although this is an unconventional use of the Logical Framework because it leaves some outcomes "floating" without supporting outputs, it is useful as a stage in the development of a comprehensive and inclusive Logical Framework for ET at UCM. It leaves the door open to the university to develop further projects to address the floating outcomes.

The six outcomes are well constructed and appropriate. They are mostly short or medium-term outcomes. Some are subsidiary to others. A tiered logic model might be a useful way of presenting them, and the supporting outputs.

The indicators and sources of verification need further work. Some indicators are outputs and processes; few are really SMART. Some of the sources are indicators or even outputs.

# The project proposals

All five projects have a role to play in the ET strategy at UCM. Some improvements could be made in the next iteration of the project plans.

# Project 1: ICT Policy, Use Policy and Strategy Development.

This project builds on policy and strategy processes already underway before the ETI. The policy process continued during Part A, but stalled in August. It would benefit from a fresh look and the more inclusive development process that is proposed. The ETS will be included in this process. The team were clear that the three day workshop should be chaired by the Rector. The consultant would have a facilitator rather than a leader role.

The main purpose of the proposed monitoring and evaluation of the policy and strategy for their first year or two in place, should not be "to ensure adherence to the rules" but to see if the policy and strategy are effective tools or whether they need improving and/or updating. M&E of the policy and strategy development process would also be useful. In the 17 February version, the review process has been taken out altogether, which means that no monitoring and evaluation of the project, apart from compliance with the rules, is allowed for in the activity schedule. This would be a missed opportunity.

This UCM project reflects the process of further strategy development and institutional adoption that needs to be followed by most of the other ETI partners in Part B. It would be useful if UCM could share lessons learnt with them in a timely way.

# Project 2 e-Learning

This project shares objectives with similar ones in other ETI institutions, namely to build a functioning institution-wide LMS, design courses and upload them, capacitate technical and academic staff and students, and monitor and evaluate the process, outputs and outcomes.

This is a well-designed project and is clearly central to UCM's objective of becoming a beacon of innovation in the application of ET for teaching and learning. It is ambitious both in its implementation and M&E goals. However, in several respects, the project is well underway. They have selected Moodle as their sole choice. Most faculties already have servers with LMS installed. It is also available on the internet. There has been an inclusive workshop, and training of technicians in the most UCM centres.

Once the project is approved, UCM will need to take stock of where they are and create a detailed project plan, including the M&E components.

# Project 3 CED Electronic Support Project

This project aims to be a significant first step to providing blended learning for UCM's Distance Education students. It is too early for an online platform. Most distance students do not have easy access to the internet. Distance learning enrolments are expanding rapidly.

As an interim solution, the project aims to provide them with CDs and DVDs containing well constructed materials with the aim of phasing out the central production of paperbased materials. The project would give a further stimulus to the improvement of materials design which is already underway in the paper versions. This encompasses both core modules and complementary edited source materials. It is also proposed to develop complementary multimedia materials on DVD. It would cut out the considerable printing and distribution costs of the central production system.

The project involves relevant capacity building for the Beira-based subject coordinators, the dispersed tutor community, and students. It also has an intensive M&E focus. The proposal is to run the project in Beira as a pilot, although the materials developed, if they are of assessed as good quality, would be made available to other centres.

# Project 4 OER for Health Sciences

This project is about introducing and mainstreaming OERs as a complement to other teaching and learning materials. It will involve a search of existing relevant OERs, and the production of new ones. The OER repository will be accessible on-line.

The project will be piloted in the Health Science faculty where the enhanced availability of good materials on-line will be particularly useful to medical students in their 6<sup>th</sup> year district placements. They all have internet access at their district hospitals.

Conceptually the project is sound. The project coordinator, Dr Konrad, admitted that there are a number of challenges which the project shares with others. The main one for Medicine is the high turnover of full-time academic staff. 80% are expatriate and most are on short-term contracts. He is also concerned about quality control of uploaded materials. The latter can be addressed by the project. The former is a much bigger challenge.
## Project 6<sup>15</sup> Research into the adoption of e-learning in HEIs in Mozambique.

This is one of the 2-3 projects in the ETI that is wholly research-focused. It began with a substantially different formulation, and has been thoroughly reworked to improve its chances of approval by PHEA. In the process, its complementarity to the implementation projects has increased.

The detailed methodology has yet to be worked out. More could be said about the project's contribution to capacity development in research – not least because this should be a focus of the project's M&E. Evaluation of the impact of the research – both at UCM and beyond, would be useful, although the timing of the project suggests that this would have to be conducted after the end of the ETI.

## Monitoring and evaluation

Apart from the Policy and Research projects, the UCM proposals include more intensive M&E than any other institution's. Sometimes this is referred to as "research", "action research" or "review". But it is all essentially monitoring and evaluation.

My workshop on M&E was not as well attended (6 people most of the time) as at most other institutions, so it is difficult to gauge the current pool of M&E competence. Of those who attended, the majority had a good grasp of the main concepts – which is encouraging. But UCM will definitely need help in this area if the ambitious M&E plans are to be carried out effectively. They may be too ambitious.

#### Management and Governance of the ETI

The ETI team as a whole seems cohesive and is technically well equipped. Turnover may be an issue in the ETI's lifetime.

The governance and management of the ETI is highly structured, with, for example four formal roles in each project team. This is somewhat paradoxical for a small, loosely structured institution like UCM. The team structure may need to be more flexible than is proposed.

## The Institutional environment

#### Institutional leadership

The Rector is on a sabbatical in the USA, so I was unable to meet him.

The Vice Rector for Finance and Administration is the formal reporting point for the ETI. He is currently also Acting Rector, Acting Vice-Rector Academic and Development (although he has delegated some of the tasks of this post to others).

## Culture

UCM – in Beira at least - seems to have a can-do, entrepreneurial culture. Its private status means it does not rely on handouts from the state, and is increasingly facing competition from state HEI's in its backyard. It has attracted donor funding, most notably from the Netherlands, but it is definitely not donor dependent. It knows that it needs to stand out from the gathering crowd. Its cost-consciousness and small size have helped it avoid unnecessary bureaucracy. There is still a high degree of informality.

<sup>&</sup>lt;sup>15</sup> According to the numbering in the 6 November version.

Although this implies risks, it is also conducive to innovation of the type inherent in the ETI.

UCM's faculty is very young compared with other ETI institutions. Apart from the expatriates, academic staff are mostly former UCM students.

UCM's widely dispersed operations may detract from the university's cohesiveness. Communication between centres is often poor. UCM's connectivity strategy will eventually create better conditions for effective communication.

UCM lacks a research culture. It does not have a research orientation, and lacks the resources, both human and infrastructural. Only two academic staff currently have PhDs. An incentive scheme for staff to generate research proposals (25% bonus for the life of the research) has so far met with no takers.

## ET in institutional strategy. Policy/strategy for ET.

UCM had a five year institutional strategy, but it has come to an end, and the process of developing a successor strategy has not got very far. The lack of a central strategic document may not matter so much in a small institution, but UCM's dispersed structure calls for a shared "road map".

As mentioned above, UCM has been working on an ICT policy and strategy, which includes an ET dimension. The first ETI project will breathe new life into this process. **Institutional structures and processes** 

UCM has a simple, lean structure. This is conducive to rapid decision-making, in Beira at least. Financial information is fragmented at present, but will be centralised and streamlined through the introduction of Primavera software once the faculties and centres are linked through ICT.

UCM has a six-monthly staff appraisal system. At present this rewards teaching performance and the development of courses.

#### Infrastructure, equipment and systems

UCM came late to the ICT table. Until 2005, there were no networked computers – and only dial-up internet access. USAID installed LANs in some faculties, but there are no inter-faculty networks. Each has up to now contracted its own ISP. UCM's hardware stock is also weak.

Although the hardware picture may not improve significantly in the foreseeable future, faculties are now required to put ICT lines in their budgets,. This is intended to generate pro-active thinking about equipment. The Director of ICT is keen to install wireless for the students on the Beira sites. This he believes will encourage more to buy laptops which will mitigate the desktop deficit. He estimates about 10% have laptops at present.

The Beira faculties are about to be linked by fibre optic cable. The other centres will be linked through leased lines, but costs are falling as the SEACOM cable is now operational. They are shortly getting an email server to take advantage of these improvements.

#### The momentum of ET for teaching and learning

UCM has two nodes where ET is being applied to teaching and learning. Both of these are recent creations. One is the Centre for Geographical Information, where the GIS Masters course is being delivered in blended mode, and the one in Regional Development

Planning has some ET elements. The other is Health Sciences where a post graduate course in HIV AIDS is being delivered on-line.

The Rectorate has told Faculties that they must all develop at least one blended learning course this year.

Apart from this, UCM is new to ET. On the plus side it does not have a history of false starts which can breed cynicism and lethargy. UCM importantly has introduced problembased learning to at least two of its faculties (Health and Economics). This should make the transition to blended learning much easier.

On the down side, its lack of experience is a contributing factor to somewhat unrealistic expectations of what it takes to develop and embed ET for teaching and learning. UCM needs a balanced approach that does not discourage enthusiasm, but ensures that projects are fully planned and resourced with conservative timelines and built in risk assessments.

Most full-time academic and senior administrative staff are said to be keen to adopt ICT and ET. Demand from students is said to be high.

#### Capacity in ET for teaching and learning

As is evident from the momentum paragraphs, there are only two staff who have so far developed their own blended or on-line courses. Staff turnover is a threat to sustained capacity development.

UCM is addressing the capacity challenge systematically. It has nominated one staff member as an e-learning "focal point" in each faculty. They will be the priority for capacity development to create a multiplier effect..

Language may be an issue in capacity development. Although UCM is meant to be a bilingual institution, only a minority of students, and not all staff, are fully competent in English.

#### Champions

One member of the team is well equipped to play the role of hands-on champion.

## Synergy with parallel interventions

Outside interventions in the ETI's arena have mostly come from NUFFIC. The current batch is coming to an end this year. Any future projects touching on ET with them or other partners should be included in UCM's ET Strategy to maximize synergy and avoid duplication of effort.

UNISA cooperates with UCM in distance education. It is worth exploring synergies there too.

## Conclusions

UCM is different from the other ETI institutions in several respects, particularly its entrepreneurial culture and lack of hierarchy. This is potentially an important asset in the ETI. It is able to be nimble, seize opportunities and learn from the experiences.

UCM's leadership is sound and committed to progress in ICT/ET for teaching and learning and administration.

UCM comes to the ETI with limited experience and low levels of capacity. Moreover, staff turnover is a big challenge. It will also struggle for some time with inadequate ICT infrastructure, equipment and systems and the dispersed nature of its operations. Financial resources may become a bigger issue as competition from the state sector increases.

Some of these challenges can be turned into opportunities.

# ANNEX 5 The main focus of Part B project proposals at each institution

Each X represents a Part B proposal

Main focus	UEW	UJ	UI	МАК	UDSM	КU	UCM
Development of e-		X	Х Хо	Х	X	ххх	Х Хо
content							
(Xo indicates a							
focus on OERs)							
Development of	х			Х	X		
LMS and associated							
tools							
Development of		Х					
multi-media and							
simulation materials							
ET capacity		X					X
development							
E-delivery			хх				
mechanism							
development							
Digitisation of						XX	
resources							
MIS scoping						X	
ICT policy							X
development							
Contextual research	X			X			X
Evaluative research	X						

Levels	Key factors								
	Social, political and economic	Organisational	Pedagogical & epistemological	Technical					
Global Regional									
National									
Institutional									
Disciplinary									
Course									

# ANNEX 6 PHEA ETI Contextual Framework for Research

# Annex 7 Principal ETI-related documents consulted in evaluation of Part A

Partnership for Higher Education Think Tank Conceptual Framework, Laura Czerniewicz and Shaheeda Jaffer, UCT CET, July 2007.

Effective Technology Use in African Higher Education Institutions: A Proposal for Phase Two of the PHEA Educational Technology Initiative. SAIDE and UCT CET, April 2008.

Selecting Projects for Part B of the PHEA Educational Technology Initiative. Guidelines, SAIDE-CET February 2009.

The Value of Educational Technology for Higher Education. SAIDE-CET April 2009.

What's Possible in Higher Education with Educational Technology? PowerPoint Presentation, SAIDE-CET May 2009 edition.

eLearning Africa, Dakar, ETI meeting report, May 2009.

ETI Research Toolkit.

PHEA Educational Technology Initiative First Annual Report, July 2009

ETI research framework. Various PowerPoint Presentations, SAIDE-CET.

Visit reports to the institutions by SAIDE-CET.

Evaluations of visits to the institutions by SAIDE-CET.

Institutional Submissions to PHEA for ETI funding.

Proposal for cross-cutting research project: Educational technology, lecturers' pedagogical assumptions and choices and institutional change and development in African higher education, UCT CET, February 2010.