PHEA ETI Part B Interim Evaluation
Final report

Executive summary

The Educational Technology Initiative (ETI) is a four year programme funded by the Partnership for Higher Education in Africa (PHEA).

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 ETI has been facilitated by a team of consultants drawn from, or contracted by, the South African Institute for Distance Education (SAIDE) and the University of Cape Town Centre for Educational Technology (CET). In this last period, the role of CET was reduced as there was concentration on the implementation of the projects. However the two consultants initially contracted through CET have continued to support the research projects.

The ETI's original strategic objectives were 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.

Part B of the programme, which began in March 2010, focuses on

- Managing successful implementation of these strategies and projects;
- Developing a programme of inter-institutional activities (including inter-institutional workshops);
- Implementing aspects of the coordinated research programme.

The programme is due to end in June 2012.

This report is of the interim evaluation conducted between January and March 2011. There were three principal elements in the methodology:

1. Visits to the seven institutions.
2. Examination of the institutions' progress reports.
3. One-to-one interviews with selected SAIDE personnel.

Baselines

None of the participating institutions was advanced in the use of ET for teaching and learning when they joined the ETI in 2008/9. There was some variation. UEW, UI and

UCM had very little – at best one or two isolated applications of ET. KU had begun to use e-content but only for distance education. UJ had the experience of several, but somewhat fragmented, initiatives. UDSM and MAK had the most experience, both supported by substantial external funding, but with mixed results and serious sustainability challenges. All institutions except UEW and UI had an LMS installed and in use. UEW had trialed the use of Moodle, but had not progressed further. UCM was using Moodle in a decentralised manner for two courses. UJ, MAK and UDSM had previously used KEWL or Blackboard and were in the processing of switching to Moodle. KU already had Moodle, although other systems co-existed there – and still do - in the context of specific external partnerships.

Destinations

There are 26 projects in the ETI. Fourteen of them – at least one at every institution - have the creation of e-courseware as a central output. In three cases – UEW, MAK and UDSM – this is accompanied by the installation and development of a Moodle platform.

The other projects have the following as their principal outputs:

- An ICT policy and strategy (UCM)
- Digitised exam papers and theses (both at KU)
- A functional specification for an electronic management information system (KU)
- A tele-classroom facility - with some multi-media material available online and by DVD (UI)
- Course content produced for radio broadcast (and also available online) and the use of mobile phones - both for distance education (UI)
- E-portfolio frameworks for students and academic staff (MAK)
- A group of academic staff comprehensively trained in ET (e-Fellowships) (UJ)
- Research into the context of ET at their institutions (MAK, UEW) and in one case (UCM) also a wider context
- Evaluative research on the introduction of Moodle and e-courseware (UEW)

Most of the projects have the explicit complementary objective of developing capacity in the technical, managerial and pedagogic dimensions of ET or in research.

Progress

No institution has withdrawn from the programme. Only one project out of 26 is currently inactive. In all the other projects there is momentum which, despite challenges, is already leading to ET products such as e-courseware and other tangible improvements. More will undoubtedly emerge from the pipeline before the programme is over.

These are significant achievements for a programme that relies largely on self-directed progress in the participating institutions. SAIDE, the programme facilitator, is on hand with advice and training, but ultimately it is the institutions that dictate the direction and the pace. This is not easy in a domain which is a green field for most of the participants.

By January 2011:

- 5 projects had e-courseware in use or ready for use on LMS: MAK, UDSM(2), KU, UCM.

- 2 projects had courseware completed but not ready for use: UEW, UCM
- 3 projects had courseware still in development, but where this was not substantially out of line with plans: UJ(2), KU.
- 3 projects had courseware still in development and substantially behind plans: UI(2), KU
- 1 project had made no progress in developing courseware: UCM.

Among the 12 other projects, seven were on or near schedule and the other 5 were behind. The seven that were on or near schedule are

- e-Fellowships (UJ)
- e-Portfolios (MAK)
- The two digitisation of resources projects and the management information systems project (KU)
- ICT policy and strategy (UCM)
- Gender research (MAK).

Three of the four research projects were substantially behind schedule.

Quality

The quality of products in the ETI is difficult to assess at present. In some projects – including all the research – the products are not yet operational. Even where they are, there is little user feedback. There are not robust quality assurance/improvement frameworks in place in the institutions.

Observations were possible of samples of e-courseware. Quality was variable, from the very basic to the genuinely innovative and engaging. The majority were at the lower end of the spectrum. However, with e-courseware and some of the other projects, what have been produced so far are evolving products that will be improved and augmented as the authors gain more experience and feedback from users.

Observation was also possible of UI's radio scripts, MAK's research instruments, UCM's draft ICT policy and strategy, and early templates for MAK's e-Portfolios. All of these seemed to be broadly fit for purpose.

Projects that stand out as intrinsically sound include UJ's e-Fellowships and the two digitization projects at KU.

Success factors and constraints.

The ETI's progress is influenced by a number of factors. The most important seem to be

1. Institutional leadership.
2. ET's strategic positioning.
3. Institutional structures and processes and culture.
4. ETI governance.
5. Synergy with other programmes.
6. ETI management and local support structures.
7. Commitment and professionalism of the programme participants.
8. Momentum of, and demand for, ET.
9. Capacity of staff.
10. Availability of key personnel.
11. Sufficiency of resources.

12. Inputs from SAIDE and other external resource persons.
13. Complexity and scope of projects.
14. Changes in scope.

The biggest single factor in the progress of the ETI is the commitment and professionalism of programme participants. The ETI is dependent chiefly on the programme's intellectual and social resources at each institution. Although there are considerable variations in ET experience and expertise, the level of commitment and professionalism among the institutional coordinating teams has been relatively consistent. In the long run, this is the more important factor.

External support from SAIDE has reinforced this base of commitment and professionalism and helped developed its capacity. SAIDE's model of non-intrusive - though persistent - facilitation and support was recognised as a success factor in Part A. SAIDE support continues to work very well in most areas of the programme. The model is recognised as empowering by the programme teams. Its intermediary role between the institutions and the funders is particularly appreciated. There is no doubt about the quality of the Moodle and e-content workshops provided by SAIDE. In the area of research, SAIDE support has been professional but not persistent enough to make up for the capacity weaknesses in the institutions.

Staff engaging in ET, particularly for the first time, need local support structures. The models for this differ among the institutions. The one that seems to be the most effective is where

- There is strong ownership of the projects by academic staff.
- They are actively networked with peers working on similar tasks.
- They work in close partnership with specialist technical staff.

All institutions have found the learning curve in the development of e-courseware, and some other types of ET application, steeper than they had expected. The majority of projects are behind schedule and capacity deficits seem to be the main factor in this. Most projects will complete their activity schedules by the end of the ETI, but quality may be an issue, and there is a risk that effective evaluative research will be squeezed in some cases through lack of time. Quality and evaluation need particular attention in the final phase of the ETI.

Animation is a particular area of technical challenge and those institutions incorporating animation in their projects will need additional support.

With a minority of projects, coordination and communication challenges have been factors in their slow progress. The ETI at each institution was conceived as a coordinated programme and not a collection of independent projects. This is mainly because of the innovative nature of the domain – the teams need to pool experience and expertise, both what was there at the start and what is being acquired as the projects unfold.

Although there are examples of projects that are prospering with confident, visionary leadership, the ETI seems to be working best where there is close coordination, regular reflection and communication between as well as within projects. Conversely, projects at two or three institutions have suffered from weaknesses in these processes.

The ETI programmes operate in generally benign institutional environments. Senior leadership and the wide policy and strategy frameworks are not obstructive, and in places positively enabling. In at least three cases, central funding for ET, through ICT budget lines, has improved since the ETI began. ICT infrastructure and equipment is improving in most institutions.

Governance of the ETI is not universally hands-on, and in some places lacks structure. These factors have led to slippage in a few cases.

Time is a universal challenge, and although there are no simple solutions to the strain on participant staff that follows from involvement in programmes like the ETI, institutional leadership needs to do more to recognise the efforts that staff make and the benefits to the institution from them.

Networking and collaboration

There has been very little inter-institutional networking or collaboration to date - apart from the annual workshop arranged by SAIDE - despite this being an explicit objective of the programme. It is difficult to tell whether the institutions would have benefitted from more networking or collaboration in the first year of Part B, but with hindsight it is unrealistic to expect it to have taken off before the projects were well underway What is clear from the progress made at the March 2011 workshop in scoping this type of activity is that there is now considerable latent demand for it. The workshop set out a framework for coordinated and supported collaboration and planning for a number of collaborations in research, evaluation and practice was set in motion.

Research

Research has not gained much traction in the ETI so far. Only four of the 26 research projects centre on research, and three of these are not making as much headway as expected. Although there was some interest in research among the participants at the outset, it was not sufficient to be a serious competitor to the “implementation” projects for the finite resources. There was – and still is – insufficient research experience and expertise among most of the institutional ETI teams for research activity to be self-supporting.

A proposal for a long-term research project - one of the original ETI objectives - was presented by CET at the first inter-institutional workshop, but was not taken up. There has been some support through the consultants initially contracted through CET for additional research activity at three institutions.

Renewed interest in collaborative research of a more practical, mainly evaluative, nature was generated at the second inter-institutional workshop. With sufficient support, this may have a better chance of gathering momentum, developing capacity and producing useful research products.

Monitoring and evaluation

In the ETI, M&E are seen primarily as developmental processes. The programme is innovative – unprecedented in some respects - and there is much to learn about how to optimise this type of programme and what is eventually achievable.

All the institutions have M&E in their project plans, although they vary from project to project in their intensity and degree of structure. With few fully-fledged products in use, it is too early to expect much M&E of product quality and effect to be taking place. But detailed plans for this should be in place. From what I can see at this stage, these detailed plans are the exception rather than the rule, and institutions will have to work hard to put them in place in the coming weeks.

Reflective practice – or action research - for project and programme and improvement has been encouraged. There are some good examples, but on the whole, there is not much evidence from the six monthly reports of this taking place. The institutions need to record more detail about their journeys through the programme to support their summative evaluations.

Early outcomes

Five outcomes are explicitly expected from the ETI by the time it completes. The interim evaluation did not set out to research these outcomes, but the following observations were made about them.

ET strategies
There are a few examples of new strategic decisions about ET being taken by senior university management since the ETI began. However it is not generally possible to say without further evaluative research to what extent the ETI may have contributed to them.

Improved teaching and learning practices
Improved teaching and learning should flow from the ETI products – provided they are of sufficient quality - and the capacity building that enables them. Pace is beginning to pick up towards this outcome and should accelerate more in the final phase of the programme.

Improvements in productivity
Productivity improvements will be less easy to measure, but important nonetheless. The three resource digitisation projects – two at KU and one at UCM - should produce more easily measurable productivity benefits.

Community of practice
The active community of practice around ET for teaching and learning has not yet materialised, at least at an inter-institutional level and beyond. The reasons for this are examined in the section on networking and collaboration.

New transferable knowledge about ET
The ETI is not just developing capacity in the use of ET for teaching and learning, but also beginning to create a better understanding of how to do it. Action research at the project level, periodic reflection by the ETI coordinating groups, participation in forums like the inter-institutional workshops and e-Learning Africa, and pan-institutional monitoring and evaluation will help us to build a more robust picture of this.

A number of other outcome “green shoots” were identified and are briefly referenced in the report.

The way forward

Most of the projects still have a lot more work to do. A small number still have to provide more capacity building to enable members to press ahead with the outputs. The projects which are planning to deploy animation have to find a way to overcome the technical challenges, which may mean buying-in expertise. This is also true of the two infrastructure-intense projects at UI. Two of the research projects still have methodological hurdles to overcome.

The majority of projects however have a clearer path to the finishing tape. Mostly, the priorities in the final phase are:

- Completion of the planned quota of outputs.
- Improvement of the quality of those outputs (especially where they are "evolving" products like e-courseware).
- Summative evaluations
- Dissemination of the ETI experiences.

Quality

Of these priorities, quality improvement is probably the highest. This is both for the benefit of the users, and because the products will be treated as exemplars. None of the institutions yet has a well-developed quality framework for ET. By the end of the ETI, a more robust quality framework should be in place. All the institutions should focus on this in the final year of the ETI, drawing on external support if necessary.

One way of improving quality is through peer networking. The networking and collaboration proposed at the March 2011 workshop is ambitious and will need focused coordination.

Much of the proposed networking and collaboration also centres on evaluation and other types of research. Although this will be largely summative in nature, planning for it needs to begin now. Evaluation needs to be resourced. It also depends on monitoring and action research activity that should have begun earlier. If it hasn't, it is not too late to start now.

Post-ETI

There is no possibility of further investments in the PHEA ETI as the Partnership has already come to an end. The momentum created by the programme and its projects must continue if the value is not to be dissipated. There is ample evidence that, in the short run at least, the momentum will be self-sustaining and that, without significant new resources, the people capacitated by the programme will help others to engage with ET for teaching and learning. Demand, from students at least, is likely to apply pressure for further development of ET.

This however will be largely dependent on the commitment and effort of the individuals currently involved. The institutions cannot rely on them forever, and more sustainable structures and processes need to be put in place. The best vehicles for this are the educational technology strategies which were drafted in Part A of the ETI. These should be reviewed and updated, and the process of institutional adoption begun in earnest. This sequence of actions should start before the ETI is over so as to benefit fully from the network.

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[1], originally established in 2000 to coordinate their support for higher education (HE) in Africa. The ETI is facilitated by a team of consultants drawn from or contracted by the South African Institute for Distance Education (SAIDE).

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[2] (the ETI Proposal) had this as the vision for the 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:
Part A focused on producing:

- A model for engaging institutions in the development of effective, integrated Educational Technology Plans;
- Seven comprehensive Educational Technology Strategies, and within them, a number of projects designed to put the Strategies in practice
- A network of researchers and practitioners established across participating institutions.
- A coordinated research programme, which comprises local-level research activities conceptualized and developed under the auspices of an overarching set of questions.

[1] At the start of the Initiative, PHEA consisted 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.
[2] *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.

Part B focuses on

- Managing successful implementation of these strategies and projects;
- Developing a programme of inter-institutional activities (including inter-institutional workshops),
- Implementing aspects of the coordinated research programme.

The evaluation

The external evaluation of the PHEA ETI is being conducted in real time, in the sense that the evaluator maintains a watch on the programme as it unfolds and offers observations and support – particularly for devolved monitoring and evaluation (M&E) methodologies - when and where it is necessary.

Within this continuous evaluation process there are three phases of more intensive engagement. The first, at the end of Part A, concluded with a report in February 2010 which was summative of Part A, appraising of Part B, and formative of the programme as a whole. Among other things it identified a number of factors within and outside boundaries of the programme which are likely to have significant influence on its performance.

The second, current, window opens on Part B roughly a year after it commenced. It has two principal functions.

1. To report to stakeholders on progress in the programme - to provide evidence of what is being achieved for the resources, including people's time, that are being devoted to it.
2. To identify strengths, weaknesses, opportunities and threats which can help the programme partners to build on success and manage challenges in the time remaining of the programme.

There will be a third and final window which will open near the end of the programme in 2012 and will lead to a summative evaluation. This will have the principal aim of providing transferable evidence of how to promote the effective use of ET for teaching and learning in higher educational institutions in sub-Saharan Africa and perhaps beyond.

Interim evaluation methodology

There were three principal elements in the methodology:

4. Visits to the seven institutions.
5. Examination of the institutions' progress reports.
6. One-to-one interviews with selected SAIDE personnel[3].

As with the Part A evaluation, the most important element of the methodology has been the visits to the participating institutions. These took place between 11 January and 4 March and lasted between 3 and 5 days each. The focus was mainly on the projects, and the visits were dominated by meetings with the project teams. There were also meetings with the programme coordinators, the governance group, at least one member of apex management[4], and with academic staff beneficiaries.

[3] I use the term SAIDE personnel to refer to staff of SAIDE and NBA Associates and any personnel contracted by them to pro vide inputs to the ETI

[4] The Vice Chancellor, Deputy Vice Chancellors or equivalent.

Where products were available to review, I was able to access at least a sample.

Topic guides for the interviews and discussions with SAIDE and institutional personnel are included at Annexes A and B.

Short reports on each visit were produced within a few days and referred to the ETI institutional coordinator for correction and comment. Abridged version of these are included at Annex C

Limitations

I cannot identify any serious limitations.

The Part B documentation I was able to see - mainly institutional progress reports on projects and the programme as a whole, and reports on consultancy visits - have not consistently provided insights into what is working, what isn't and why - which is the main evaluative focus at this stage. The interim evaluation therefore relied heavily on group discussions and interviews with key informants - SAIDE consultants, ETI coordinators and members of project teams.

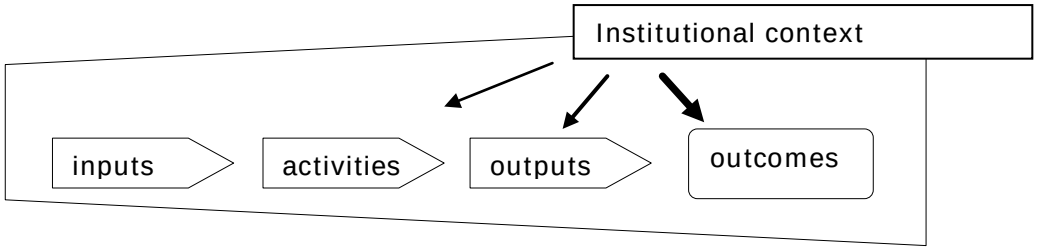
Generally, however, the discussions and interviews were sufficient to fill the gaps. This is partly because I already had a good understanding of the institutions and the projects - a new evaluator at this stage would have struggled to make headway without better documentation. But another factor has been the willingness of ETI participants to be open and analytical in these discussions and interviews.

In a few cases, key informants were unavailable and I had to rely on indirect information. This could have been a limitation, but consultations on the first draft report suggest this has not been the case.

The summative exercise in 2012 will need more systematic and penetrating evaluative research by the institutional teams.

The evaluation report

The report covers the standard value chain of inputs, processes, outputs and outcomes. It also looks at the wider institutional contexts in which the programmes operate and the contextual factors that may affect them.



The report narrative is as follows:

1. Progress against planned project milestones and outputs (e-courseware, research deliverables etc)
2. The quality of the outputs

3. The success factors and constraints within the programme and in the institutional contexts that may have affected these results so far.
4. Early outcomes
5. Conclusions we can draw and what they imply for the remaining period of the ETI.

In the report, the progress of different projects will be compared. The purpose is not to make judgments about the team's effectiveness, but to help teams to have a perspective on how they are doing; and also to see if other projects may offer models for improvement in the final phase of the ETI.

This evaluation is only a snapshot. There is still a substantial period of the programme ahead. Slow progress in the early stage is not necessarily a clear indicator of the results we will see at the end of the programme.

Baselines

None of the participating institutions was advanced in the use of ET for teaching and learning when they joined the ETI in 2008/9. This is self-evident. If they had been significantly more advanced, they would not have been included in the programme, or would have been involved as a resource.

Across the low base of experience there was some variation. UEW, UI and UCM had very little – at best one or two isolated applications of ET. KU had begun to use e-content but only for distance education. UJ had the experience of several, but somewhat fragmented, initiatives. UDSM and MAK had the most experience, both supported by substantial external funding, but with mixed results and serious sustainability challenges.

All institutions except UEW and UI had an LMS installed and in use. UEW had trialled the use of Moodle, but had not progressed further. UCM was using Moodle in a decentralised manner for two courses. UJ, MAK and UDSM had previously used KEWL or Blackboard and were in the processing of switching to Moodle. KU already had Moodle, although other systems co-existed there – and still do - in the context of specific external partnerships.

Pre-existing capacity in ET in the institutions is reflected to a large extent in the length and depth of their experience of it. UEW bucks this trend somewhat in that they had 2-3 people with good experience of, and/or professional education in, ET. UDSM and KU probably had the greatest capacity, in terms of the largest number of people with professional education in ET. The bias in UDSM was on the ICT side, and at KU towards distance education. No institution therefore could be said to have much ET capacity devoted to ET for blended teaching and learning at the start of the ETI Part B.

There is no law that says the development of ET must be driven from a dedicated unit, embedded in the institution's structure. It may however be a factor for sustainability. Indications of this will be sought in the summative evaluation next year, but it is worth noting at this point that only UDSM, KU and MAK had dedicated ET units at the outset – and this is still the case. MAK's currently consists of only two people.

Finally, because ET relies heavily on the scale and quality of ICT infrastructure, we should be aware of the institutions' differing baselines for this factor. UCM's and UEW's ICT were the weakest. UI's was satisfactory but constantly assailed by power outages. The others were broadly satisfactory, or in their context good. All were improving, particularly in bandwidth.

Destinations

There are 26 projects in the ETI. Fourteen of them – at least one at every institution - have the creation of e-courseware as a central output. In three cases – UEW, MAK and UDSM – this is accompanied by the installation and development of a Moodle platform. In one of UCM's projects the courseware is for distance learners and will be mostly accessed by CD/DVD; and another is centred on the use and development of open educational resources (OERs).

The other projects have the following as their principal outputs:

- An ICT policy and strategy (UCM)
- Digitised exam papers and theses (both at KU)
- A functional specification for an electronic management information system (KU)
- A tele-classroom facility - with some multi-media material available online and by DVD (UI)
- Course content produced for radio broadcast (and also available online) and the use of mobile phones - both for distance education (UI)
- E-portfolio frameworks for students and academic staff (MAK)
- A group of academic staff comprehensively trained in ET (e-Fellowships) (UJ)
- Research into the context of ET at their institutions (MAK, UEW) and in one case (UCM) also a wider context
- Evaluative research on the introduction of Moodle and e-courseware (UEW)

Most of the projects have the explicit complementary objective of developing capacity in the technical, managerial and pedagogic dimensions of ET or in research.

Progress

Comparing progress against key milestones in the projects by no means tells the whole story. It may for example tell us that the milestones were over- or under-ambitious. But in the ETI, we can be confident that it gives us some indication of the degree of challenge that the teams have faced.

The next paragraphs look at the bare record of progress. Later sections look at reasons.

According to the Part B submissions, and adjusting activity plans to allow for a notional revised start date of March 2010, most of the e-courseware projects were expected to have had some materials ready for use by the beginning of 2011 – in some cases several months before.

Progress by January 2011 was follows:

- 5 projects had e-courseware in use or ready for use on LMS: MAK, UDSM(2), KU, UCM.
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- 3 projects had courseware still in development and substantially behind plans: UI(2), KU
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Among the 12 other projects, seven were on or near schedule and the other 5 were behind. The seven that were on or near schedule are

- e-Fellowships (UJ)
- e-Portfolios (MAK)
- The two digitisation of resources projects and the management information systems project (KU)
- ICT policy and strategy (UCM)
- Gender research (MAK)

The radio component of UI's joint project for distance education was on schedule, but the mobile phone part and UI's tele-classroom project were substantially behind.

Three of the four research projects were substantially behind schedule - the two at UEW and one at UCM. The evaluative research project at UEW was delayed because it is dependent on progress in the LMS/e-content project.

Quality

The section above looked at the bare bones of progress in producing e-courseware, research products etc. This is important, but it is not the whole story. Quality matters even more – it is the flesh on the bones.

Quality, particularly in areas of innovation, is often difficult to define. It is usually highly context-specific – even individual user-specific. Relevance is an important factor in quality and one person's relevance can be another's irrelevance. Quality assessments need to include feedback from users, and unfortunately in the ETI there is very little of this type of information available, mainly because there has not yet been much user engagement with the products. Three of the research projects have not reached the piloting stage, so we cannot say much about them from a quality perspective.

Quality can also be producer-defined. Producers use quality frameworks – often a set of predefined standards against which the products can be assessed. UDSM is beginning to work with a framework which was produced at a SAIDE-facilitated workshop. In most institutions quality frameworks are still work in progress or future intentions. Some institutions have or are intending to set up quality assurance units. It is important that these units collaborate with the ETI teams in developing quality frameworks for e-courseware and other products.

The most common method of quality assurance used in the ETI so far has been review by "experts" or, less commonly, by peers. In some cases the review has been conducted by SAIDE or other external experts, in others by in-house personnel. Wherever they are assessed, specialist products like e-courseware need to be assessed by people with experience in that field, and not just by people with experience in developing conventional teaching products. This has not always been

the case with the ETI institutions up to now - simply because people with the relevant specialist experience are thin on the ground.

e-Courseware

I am not an expert in e-courseware. But I have enough experience of this field to be able to sense-check what I observed. Where ET products were in use or ready for use, I was able to access examples. The sampling was a mixture of the purposeful and random. I asked for particularly good examples – to see what was possible at that institution. I was then usually able to choose a few others randomly.

There are a small number of completed e-courseware products at some institutions that are innovative and engaging. Examples include a module at MAK where students of computer security were engaging very actively (4700 contributions) in a forum about their own working experience in this area; and one at UCM in IT where the students are divided up into on-line sub-groups for assignments. It may be no coincidence that both of these examples are from modules within IT courses.

Many examples I accessed were still very basic – typically just the course outline, some lecture scripts and the facility to upload assignments – and do not reflect the full range of training provided in SAIDE e-content workshops.

A substantial minority however are more encouraging. They contain at least one interactive element such as a quiz, a news forum or live chat. What is much less common to date is extensive and meaningful engagement by students in forums and live chat events.

Research

Among the three contextual[5] research projects in the ETI, none has yet reached the reporting stage. MAK's gender research has robust processes, has produced sound research instruments and is generally encouraging. In the other three projects the research instruments and field processes have not yet been finalised so it is difficult to make judgments about their quality. However the overall performance of the projects so far suggests that there are likely to be quality challenges.

Other outputs

Of the other project outputs, a few are already observable or can be envisaged to some extent.

The UI distance education project has produced some radio scripts that appear to my non-expert eye to be engaging. The other UI projects – tele-classrooms and mobile phone applications for distance learning - are at too early a stage to comment on the quality dimension.

UCM's draft ICT Policy and Strategy are bold attempts at comprehensive, medium to long-term, institutional planning with ET at centre-stage. Most important will be how they are used. Other ETI institutions may benefit from keeping track of UCM's experience in this.

[5] Contextual research focuses on the environment in which the projects operate – e.g. access and use of ET and ICT, gender factors in engagement in ET.

The UJ e-Fellowship is a well designed programme for building capacity in ET. It has benefited substantially from lessons learnt from a first cohort carried out with Carnegie Foundation funding. It is also being well executed with some early compelling evidence of user benefit.

The e-Portfolio project at MAK has not yet reached the full product stage, although it has well thought-through conceptual frameworks. There are concerns that it may be too ambitious for a first attempt at an ET product for which there appear to be no relevant models in MAK's context. Quality assurance will be paramount.

The KU digitisation projects are simple in concept and have fewer quality issues than the others. The principal ones are in the quality of the pre-existing products that are being digitised: the exam papers and theses. KU is aware of this and is beginning to apply quality control to the exam papers that will be accessible through this project.

The technical specification for KU's management information system appears to be intuitively sound, but it is partially based on a survey that had an unreliably low response rate. A further round of consultations will be needed to confirm the user requirements.

All the people I spoke to readily acknowledge that with e-courseware and some of the other projects, what have been produced so far are evolving products that will be improved and augmented as they gain more experience and feedback from the students. This stresses the importance of M&E both from the producers' perspective – what further help they need and in what areas – and from the students.

Success factors and constraints

Introduction

This section is the largest in the report. It examines the factors that appear to be making a difference to the progress and quality of the ETI products. In some cases it is the project processes themselves that are the main factors. In other cases it is external factors. The mix and potency of factors is different at each institution.

It is relatively easy to identify the reasons why projects are behind schedule; and there are also some clear indications why quality is not as high as it might be. This section will look at the constraints and other factors behind sub-optimal progress and quality and suggest ways in which they might be overcome.

It is less easy to pinpoint why some projects – or components of projects – are doing particularly well. But it is just as important to identify these success factors, so the institutions concerned can build on them and other institutions consider whether they might be relevant to them. The report makes findings from this perspective too.

The Part A hypothesis

There are a number of factors that can influence the performance of projects like those in the ETI. The Part A evaluation produced the hypothesis that the following would be the key success factors:

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.

In this section, I assess the extent to which these and other factors have influenced achievement or conversely been a source of challenge. Additional factors that appear to have been at work in the ETI include:

- The availability of key project personnel.
- ETI governance (as distinct from management).
- Other capacity – in teaching in general, research, and project planning and management.
- Complexity and/or ambition of the projects.
- Changes in scope or direction of projects.
- Sufficiency of financial resources.
- The amount and quality of inputs from SAIDE personnel and other external resource persons[6].

Institutional leadership

Senior leadership will always have a bearing on institutional development programmes like the ETI. In the first place they enable the programmes to go ahead by giving authority to the programme managers and approving any necessary internal resourcing.

But their potential influence doesn't end there. As in any other change programme, people in the organisation will tend to take their cue from what they perceive to be the attitude of senior leadership. If leaders are visibly supportive of a programme like the ETI – and particularly if they participate - others will pick up the signals and are more likely to engage with it, or at least not actively resist it. These signals can emanate from policies and strategies, but personal endorsement and engagement is just as effective - sometimes more so - and more immediate.

In a less direct sense, leadership can influence the programme simply by being effective in leading. The converse – weak or unstable leadership - creates a vacuum, depresses morale and distracts attention from development.

In the first year of ETI Part B, it seems that senior leadership has been a positive factor – or at least not a negative one - in all the institutions. At UJ the ETI coordinator briefs the Vice Chancellor (VC) personally on developments and has obtained his support to resolve some difficult people issues. At KU, the VC continues to chair the ETI governance committee and participate in one of the projects. Where and when she has focused on the programme, despite her demanding workload, her influence is clear to see. For example the project she participates in – the Common Research Methods course - is probably the highest performing of the six. The Deputy VC at KU brought his authority to bear to help the Digitisation of Exam Papers project overcome a procurement bottleneck.

Perhaps the best example of the effect of institutional leadership is at Makerere. At the end of Part A, there was concern that the instability of the leadership

[6] This was dealt with separately in the Part A evaluation, but it logically belongs with other success factors

environment at Makerere might derail the ETI programme. Institutional politics were pre-occupying people. Approvals for important proposals were difficult to get.

A change of leadership at that institution has turned a negative factor into a positive one as the new VC has lent his support to the goals of the programme. As a former Dean of Computer Sciences, he has moved ICT development – including the application of ET - up the agenda. For example he has allocated more resources to ICT equipment for staff and students. In the Business Plan he presented in his candidature, he signaled his intention that Makerere should "embrace ICT in teaching, learning and assessment. Every member of staff should in a short space of time, be trained in e-learning and go on to develop at least one course fully on-line."

ET's strategic positioning

In the Part A evaluation, I suggested that among important success factors were that

- ET for teaching and learning features prominently in the institution's overall strategy.
- There is an agreed policy and/or strategy for ET.
- 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.

These factors are mainly about the visibility of ET and the priority it appears to have amid the competing claims of other important aspects of institutional development and management. It is a two-way street. ET practitioners and advocates need to help senior management to understand the importance of ET and what is necessary to move it forward. This clears a path for the inclusion of ET in institutional strategy and for the adoption of specific ET strategies, either as stand-alone instruments or as subsets of ICT or pedagogic strategies, or both.

Strategy documents are useful in themselves. They provide legitimacy and context for projects like the ETI and specific signposts for newcomers. More important, they need to be implemented and regularly reviewed. This implies regular engagement of senior management with the domain. Signing off a strategy is not enough. If senior management do not walk the talk with ET, that will soon be noticed by others in the institution and ET will slip down the priority order.

In the ETI to date, the strategy picture is one of work in progress. Most institutions have strategies which include references to ET. Some, like MAK's business plan and an instruction from the UCM Rectorate, refer to specific short–term objectives for e-courseware – both, as it happens, over-ambitious.

In several institutions formally adopted ICT strategies exist of which ET is a part. But none of the institutions has an explicit ET strategy which has been formally adopted by the university's highest court. This applies both to pre-existing ET/e-learning strategies like the ones at UJ and KU, and to the ETI Strategies that formed the end-product of Part A. Their status everywhere is equivalent to draft or work in progress.

This is not a particularly worrying picture. In some ways it is better that ET strategies stay fluid at this stage of rapid development in the domain. Most of the ETI coordinators said that they referred to their ET strategies when necessary and are aware of aspects that needed amending and updating. For example since the ETI Strategies were completed in late 2009, mobile phones have emerged much more

strongly as potential delivery and interaction devices than was expected, and may need to be addressed by the Strategies for the post-ETI future.

What would be useful is for the institutions to revisit their strategies in 6-9 months, amend and update them in the light of the last two years' experience, the changed external environment and perceived needs for development going forward. Following that it would be sensible to seek formal approval, not least because sustaining the progress of the last few years, and any near-future development, will need resourcing.

Locus and status of the ET unit and the existence of champions

Only MAK, KU and UDSM have ET units that are embedded in their institution's formal structures. UI and UJ have definite plans to create one.

At present there does not seem to be a clear correlation between the existence of an ET unit and achievement in the ETI. UJ and UCM are making good progress in their e-courseware projects with networks of teams rather than formal structures. KU and UDSM have not always had success in linking the expertise in their ET units with the academic personnel who are the main subjects of the e-courseware projects. MAK's ET unit has only two people but is functioning well as a nerve centre for the ETI. The scale of UEW's ambition in their Moodle and e-courseware project is not sufficient at present for the lack of an ET unit to be an issue. UI currently relies on a network and has struggled up to now to give it momentum.

Irrespective of the existence or size of the ET unit or network, there do not appear to be substantial status issues for the ETI. No institution complained that their profile was not high enough. Some faced difficulties generating or maintaining interest in their target groups – mainly academic personnel. The reasons for this are complex, and do not appear to be principally about the status of the ET unit or network.

A more potent factor could be the existence or not of champions – credible people with relevant experience of ET for teaching and learning who are able to generate interest and excitement beyond the core teams. It is difficult for me to have a clear picture of this, but there is evidence that effective champions are making a difference at some of the institutions and that their absence at others is a factor in slow progress. Institutions with the lowest ET baselines are less likely to have potential champions.

All the ETI teams need to continuously market ET and themselves and try to generate and maintain buy-in. With products coming on stream, this will be easier in the latter stages of the programme. ET's "brand" in the institutions should become more assertive.

Institutional structures, processes and culture

There are a number of structures and processes in the wider institutions that can have a bearing on programmes like the ETI. The most potent are probably:

- Procurement and consultation processes
- Reward systems
- Quality assurance

Procurement has not been a major issue in most ETI institutions, partly because there has not been much expensive equipment involved. The only two that have had challenges within the scope of the ETI are UEW, where the procurement process had to be repeated because of a cost under-estimate in the original specification, and KU where the sheer volume of procurement requests at the moment has created bottlenecks.

UI's teleclassroom project involves the purchase of costly and complex equipment which is being funded by the university itself. This is taking a long time because there are no fast track procedures at UI for centrally-funded procurement on this scale.

Other institutions have faced due diligence issues about the engagement of particular consultants, but have found ways to accommodate them.

Consultation processes about change – such as new curricula – take longer at some institutions than others. This is a partly a reflection of institutional culture. UI is probably the extreme example of a consultative/consensus-oriented institution where change inevitably takes longer. This is not necessarily a negative factor – it can ensure wide acceptance of change. However it can be frustrating for project leaders in innovative domains like ET.

UCM and UJ are at the other end of the spectrum. UCM, a private university, has to be entrepreneurial to compete with the subsidised state sector. Decisions are made very quickly, sometimes without a clear trail. This suits an innovation programme, but it can have a downside in feelings of exclusion in other parts of the organisation.

UJ, for historical reasons, has a culture which implicitly encourages innovation and radical solutions. This however does not guarantee acceptance of rapid change, as the ETI team has experienced.

One of the most potent constraints on the ETI is the lack of institutionalised incentives for academic staff to engage with ET – or even to produce better learning experiences for students. Most of the institutions still reward academic staff principally on the basis of research publication. There is recognition in several that the basis of reward needs to be broadened. But change in this aspect of university life is slow to take place. Ironically, at UCM, there are plans to go in the other direction reflecting their need to incentivise involvement in research.

Quality assurance (QA) is important for all types of educational delivery. ET is no exception. QA for ET is undeveloped in all the institutions, although some are beginning to put frameworks together. This is an aspect of the ETI that should feature strongly in its final year. Where institutions have, or are currently creating, their own QA units, it is important that QA frameworks developed in the ETI are harmonized with the work of those units.

ETI governance

In some cases, ETI governance is indistinguishable from the programme's relationship with institutional leadership. At KU, UJ, UI, and UCM, the ETI coordinator has a direct line to the apex leadership – either because the latter leads the governance committee (as at KU) or because governance, *de facto*, takes places through direct briefings between the coordinator and apex leadership.

This is a mixed blessing. On the one hand, it cuts out a layer of bureaucracy when a top-level decision is needed. On the other, it is often less easy for an apex leader to intervene than someone from the next level down. This can be because they are simply too busy or often away, or because it is politically less easy for an apex leader to favour one group over another where conflicts between the institution's personnel are the root of the problem. This paradox of apex leadership involvement in governance seems to have contributed to delays in at least one of the projects at KU; and to project leadership issues not being resolved at UCM.

Governance of the ETI at UEW experiences a different type of ambiguity. The programme is notionally overseen by the Externally-Funded Projects Office (EFPO), but their personnel often function more like team members, offering advice and logistical support. In these circumstances, it is more difficult for them to hold the programme managers to account.

The most straightforward models of governance are at MAK and USDM. The ETI at these institutions is actively overseen by a level of management above the programme and its projects, but below apex leadership. At both institutions this model seems to function as intended, with proper scrutiny and selective, substantive decision-making taking place at the governance level. At MAK there was a hiatus in the arrangement for about 3 months last year when the chair of the governance group was on extended leave - and the effect was noticeable.

Governance of programmes is a safety net, but an important one. It should not be left to chance. Informal arrangements can be effective in some circumstances but they carry risks, including accusations of favouritism and the knock-on effect of absences of the senior parties.

Synergy with other programmes

All the institutions have at least one other externally-funded programme that touches on the work of the ETI. For example, UDSM has initiatives funded by the Word Bank and the Finnish government; UJ is into its third phase of Carnegie support, and a NUFFIC-funded programme is winding up at UCM.

It has not been easy to get information about these programmes and it leaves the impression that they operate in silos without much harmonisation or cross-fertilisation. This would not be a good thing, especially if there are opportunities for the sharing of resources and learning. An effective ET strategy would address these issues.

There are a few examples of good practice in this area. UDSM and UJ have both made innovative use of parallel programmes to fill resource gaps in the ETI. Current Carnegie funds have been used to engage a multi-media expert at UJ who will be able to provide inputs to the ETI. UDSM have made use in their projects of recent graduates who are being trained in ET through the Finnish programme.

The ETI has benefited at UJ from lessons learnt in the earlier Carnegie phases – such as the importance of buy-in, and a better design for the e-Fellowships. This may well be true at other institutions. A robust action research culture would ensure that this type of learning from past programmes is mainstreamed.

ETI management

There should be at least two layers of management below the governance level: one that coordinates the programme as a whole, and another that focuses on particular projects. There is no one single model at work; in fact every institution has its own unique set of arrangements. Styles of management and teamwork also differ. It is not appropriate to prescribe a particular model, but it may be helpful to point to examples of practices that work well in their own context and others that may need adjustment.

Regular contact among team members at project and programme levels and between the two levels, is without reservation, an important factor. It assists communication, maintains momentum and morale, and supports intra- and inter-group learning.

The action research cycle of plan-act-review-adjust[7], that the ETI advocates for project optimisation, works best with regular face to face contact, particularly if, at certain intervals, the meetings are structured rather than casual.

For one or two institutions this does not require much organisation. UDSM's two projects are located firmly in the Centre for Virtual Learning; and although other people are involved, the CVL personnel drive the projects and meet together almost every day. Nothing important gets overlooked and challenges are faced, even if they are not always overcome.

At UCM there is a core group of three in the steering committee who are also active in three of the projects - and they too meet most days. Synergies between the projects are identified and exploited and there is a constant learning process in motion. There is a stark contrast at UCM between this and two other projects – the research and the OER projects – where the core group's involvement is peripheral. These two projects are not moving forward satisfactorily. The problems are not only about communication, but it is likely that more regular communication would have kept a spotlight on these projects, and the challenges would have been faced and solutions discussed more openly.

UJ has a three-tiered model. There is a coordinating group of 4-5. Not all of them are directly involved in an ETI project, and the members have diverse backgrounds, but they are nonetheless highly engaged with and committed to the ETI. They meet regularly to discuss both operational and strategic issues. A type of action research is at work here too.

There are two further tiers at UJ: meetings of the coordinating group with representatives of all three projects; and meetings of each project team, sometimes with the designated liaison member of the coordinating group. This may sound over-elaborate, but most meetings at each level are usually short and issue-specific with a minimum of bureaucracy. It has been designed and adapted around the programme's needs. It works well at UJ.

MAK's model is much less structured but also seems to be effective. The project teams are relatively autonomous. Each works well in itself. Coordination depends to a large extent on the efforts of the ETI coordinator who is a member of one project

[7] See section on monitoring and evaluation below

team but also liaises regularly with the others. His hands-on and energetic engagement is complemented by the more detached perspective of the former Director of the Institute of Adult and Continuing Education, now Deputy Principal of the College of Education.

At UEW too the structure is simple. The project teams meet on an ad hoc basis and come together regularly with the participation of the EFPO. As the scope of the projects at UEW is quite confined, this model is not wholly inappropriate. However all projects need some regularity and structure in communication.

The projects at UI and KU operate more independently of each other than at the other institutions. Coordination at each of these institutions is in practice mostly in the hands of one person. Both of these people are extremely busy and have not always been able to devote as much time to coordination as was needed. This may partly explain why some of the projects at these institutions have made slow progress.

It is difficult to be objective about the style and quality of project management and team work. I have come across examples of projects that would benefit from more systematic project planning and implementation. The research projects in particular require meticulous planning and management as they move into the field research stage. There was not much evidence of this at UEW and UCM.

But other projects have clearly benefited from not sticking rigidly to plans. For example, two or three of UCM's projects seem to be evolving constantly and the original plans are partly redundant. Like the projects, the plans should evolve.

There are many different styles of leadership, and the ETI does not advocate any one in particular. One quality in leaders that does seem to produce good results is passion. Passion – we might define it as enthusiasm shaped by vision – definitely rubs off on others. To be effective it needs to be grounded, and passionate leaders need to be sensitive to team members who may not be able to run so fast. The UJ e-Fellowships and the KU Common Research Methods course are examples of projects led with passion.

Commitment and professionalism of participants

The ETI is dependent chiefly on the programme's intellectual and social resources at each institution. No amount of financial resource or external support would be able to make up for deficits in those areas. Although there are considerable variations in ET experience and expertise, the level of commitment and professionalism among the institutional teams has been relatively consistent. In the long run, this is the more important factor.

Momentum and demand

I hypothesised in the Part A evaluation that pre-existing momentum was likely to be a success factor. By this I meant that success was more likely if:

- 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.

This was presented as a baseline factor. What momentum was there at the start of Part B? But changes in the level of demand from students and university personnel during the life of the ETI are also likely to be a shaping factor.

Without surveys of attitudes, it is impossible to be sure about the demand factor in the institutions. Three of the research projects will provide data that should give us insights at those institutions, but those data are not yet available. There is anecdotal evidence that demand is growing everywhere, and logic would support this view. But without research data, we cannot say how high it is at each institution.

It is possible however to look more generally at the institutions' experience of ET in the run up to the start of the ETI. There were no pure standing starts. Every institution had had some experience of applying ET to teaching and learning, even if it had been one or two isolated initiatives. UI and UEW probably came closest to the standing start position, and that may explain why they have found it hard to build up momentum. By contrast, UJ and MAK had considerable momentum already, even though ET was by no means institutionalised at those places.

UDSM was a concern not because it had no experience of ET, but because its experience had not been a particularly positive one, with several initiatives that had not led to sustained progress. There was a danger that ET's "brand" had been tarnished. This may be a factor in the difficulty the UDSM teams have had in engaging with some personnel; although on the whole, progress there is satisfactory.

Capacity

A central objective of the ETI – perhaps the most central objective - is to help the partner institutions develop capacity in ET for teaching and learning. At the start of the programme none had a critical mass of people with competence in this domain, otherwise there would have been no need for their participation. But none was starting from scratch. In all the institutions there were a small number people who understood ET, and in most cases had already applied it. This was seen as essential to get things going – to design the projects and offer help to people coming on board for the first time.

This process of incremental development of capacity in ET among a wider group of project participants is central to the ETI. It is also bound up with other competencies. The fundamental ability to design and deliver good, learner-centred teaching is one. Others include research, radio scripting, database design for resource digitization and e-portfolios. The success of the ETI in all member institutions is also dependent on a key complementary set of competencies: project planning, management and evaluation.

First I will look at how the institutions are faring in developing capacity in ET for teaching and learning.

ET for teaching and learning

At every institution during my recent visits, a core member of the ETI team told me that they had found the development of e-courseware harder than they had expected. All the institutions had had externally facilitated workshops early in their e-courseware projects, and a frequent comment on the experience was that it had "opened their eyes" to the complexity of developing e-courseware. Some project

leaders delayed organising workshops because they were not convinced they were strictly necessary, but discovered for themselves that e-courseware was a bigger challenge than they had thought.

One of the reasons many participants found this difficult was because they have never been trained to teach. That is not to say they are ineffective teachers, but there are some aspects of teaching, whether for children or tertiary level students, that are not instinctive and need to be learnt and practiced. This is a hurdle that many of the ETI projects are facing along with the more technical aspects of instructional design and leveraging on Moodle.

The standard SAIDE workshops have addressed both fundamental learner-centred teaching and more ET-specific matters such as instructional design of e-courseware and use of Moodle. This is a big agenda and it is not surprising that some of the projects did not “take off” automatically after the delivery of the workshops. In fact a few hardly moved at all until there was another injection of external facilitation, even though in most cases, templates for e-courseware were made available.

The SAIDE workshops were a common factor everywhere. Some – such as those at KU - were shorter and more condensed than others, but their formats were very similar. The reasons why some projects - like the Common Research Methods course at KU and e-content at UCM - did take off immediately after the workshops - and others didn’t - are founded on a number of institution-based variables, certainly more than one at each place. Two stand out.

Attendance is an obvious factor. The workshop for the OER project at UCM was very poorly attended mainly because of the lack of availability of the key personnel. At others, such as one at UDSM, participant numbers fluctuated wildly during its course. In these circumstances, it is hardly surprising that not all the intended participants were ready to “hit the ground running” with ET development after the workshop. A strong learning point is that project managers should do all they can to ensure workshops are well attended by those whom they are intended for.

Probably the most fundamental factor that cuts across the projects is the need for a support framework to be in place for project participants at an early stage, preferably before the initial workshop and definitely immediately after. Workshops – no matter how good - are not enough. Developing e-courseware is so unfamiliar an experience to most people that they are not able to fly on their own. Even small, mutually supportive, groups may not know how – or have the confidence to - start work without further support.

Above all people need hands-on help and advice. Support needs to come from people who have at least some experience in developing content for e-courses – including, where relevant, work with OERs – and colleagues who specialize in the technical aspects of configuring material for the LMS. These two groups are usually located in different parts of the institution, and it is unlikely that this support framework will fall into place spontaneously. It is the job of the coordinating team to pro-actively design and manage this framework.

There is no standard framework in the ETI institutions. At UCM, it mainly takes the form of what they call a “peering” process whereby personnel who have already developed e-courseware, coach and mentor others who are beginning the journey. This system seems to be working well on a small scale, partly because the

coach/mentors are “fired up” by their first achievements in developing e-courseware; and partly because, being lecturers in the IT department, they combine both pedagogic and technical perspectives. There is a question over the extent to which coach/mentors need training in this role.

UDSM provides a centralised support framework with a strong technical component. ETI project management is located in the CVL whose personnel sit alongside their academic counterparts to help them articulate what they want the CVL to put online. They also provide an all-day support desk for staff who are trying to do it for themselves. Where the academic personnel are able and motivated to design the learning content, this works well. But where they lack one or both of these, progress has been slower. The CVL has personnel who have had extensive training in the pedagogic aspects of e-learning, but have not had much opportunity to apply this training in context. The sources of practical support for pedagogic input to e-courseware may need to be strengthened.

The ETI at MAK, UJ, and UEW also has the benefit of people at the centre of the programme who have followed postgraduate courses in ET. At UEW it is too early to tell the extent to which the multiplier effect of this resource is being leveraged. At MAK and UJ, the people concerned are energetically transferring their knowledge and skills to good effect in the projects. At UJ, there are two: one from the academic side and one from the technical. At MAK, the person’s roots are technical. At both institutions, the people concerned are converging in the middle ground. There is a strong suggestion that one or two people with this type of extensive training is a key success factor, partly because of the confidence it instills in them and their colleagues.

At KU, the three e-courseware projects were slow to move into the development of e-content stage. In one – Common Research Methods – this was deliberate, as the early stage of the project focused on getting buy-in and developing a curriculum from scratch. The other two projects however moved more slowly than planned, hampered by the lack of a support framework. The Institute for Open, Distance and e-Learning (ODeL) has sufficient technical expertise in most of the relevant areas and even runs courses in the necessary skills. The university has a good number of academic personnel who have experience in designing learner-centred courseware for distance education. It even runs courses in pedagogy. But none of this was being leveraged by the ETI projects. By the end of 2010, however, a good working arrangement was in place with ODeL technical personnel. The pedagogic aspects of e-courseware may still need attention, but at least there is an awareness of this need and that there are resources available at KU.

UI have made slow progress with their e-courseware and it is not clear where a support framework will come from. UI do not have an obvious cluster of technical expertise in e-learning, but they are aware of this need. This would seem to be an area for urgent attention.

Animation

One area of e-content that all the institutions are struggling with is animation, and to a lesser extent other multi-media applications. The technical challenges are much greater than with normal text-based e-content and the use of plug-in applications like news forums and chat. In the case of animation, where appropriate OERs are not available, people with design skills are needed. This can require extensive training.

At present it seems that no institution has the full set of skills in-house to produce quality animated learning objects. It will take time – possibly more than is left in the ETI - to fully develop them, depending on how ambitious the projects are in this respect.

The most obvious short-term solution then is to buy in the expertise. KU and UJ are exploring this solution. KU has identified a Nairobi-based company that can create the finished products, but do not have experience in developing client capabilities. UJ have contracted a local resource who can do both. Both these options are expensive. UJ is exploiting synergies with a parallel Carnegie-funded programme to partly fund the technical inputs from that source.

Research

An objective of the ETI is to generate research in ET – for example baseline research on access and use and evaluative research on the projects – and in doing so, develop research capacity. However, little research activity has taken place within the ETI - a matter that will be explored in a later section of this report.

One of the reasons is that there was so little research capacity among people with an interest in ET in the institutions that the teams working in Part A of the ETI were unable to find enough takers to formulate research projects. Even among those that did, there have been capacity challenges. ETI coordinators are clear and open about this.

It seems unlikely now that the ETI will make a significant impression on research capacity. But there is still a need to support the current research project teams.

Project planning, management and evaluation

A final area of capacity that is needed in programmes like the ETI is project planning, management and evaluation. A lack of project planning capacity emerged as an issue in Part A. The majority of institutional teams needed considerable hands-on help with this. Project planning should not be a one-off exercise - revisions to plans, and micro-planning are needed at later stages in projects. Some teams have had difficulties with this, particularly in the research projects where the need for planning is probably most acute.

Project management – which involves for example assigning roles, monitoring performance, managing stakeholder relationships, controlling finances, addressing the unexpected – has also been a challenge for some. Teams themselves have identified this.

I have been able to tell from my own engagement with the teams that project evaluation capacity is weak in most of the ETI teams.

The ETI did not set out to systematically address project planning, management and evaluation capacity, but it may be a lesson for future programmes that a minimum capacity in this area needs to be in place before projects get underway.

Availability

One dimension of capacity is the availability of capable people both numerically and temporally. One of the biggest challenges that the ETI personnel are experiencing, at all institutions, is finding time to devote to ETI work *per se,* and at relevant times – e.g. when other people are free or at a specific window of opportunity for an ETI project. Research projects are particularly constrained by timing issues because surveying students or even academic staff can only be done effectively at certain times in the university calendar.

Time and timing are problems because ETI personnel – rightly – are not project-dedicated. They are involved in the projects alongside their normal jobs. This is the best way of mainstreaming programmes like this. They should operate within the fabric of the institution not as add-on projects.

But this means that project personnel have to reconcile ETI work – including attendance at workshops – with normal responsibilities in teaching, institutional governance, technical support etc. Many, particularly the programme coordinators, end up working very long hours. This may be inevitable, but it is even more important that the institutions adequately recognise this type of contribution, both in their reward systems and in workload management.

Sufficiency of financial resources

Whether or not the financial resources available under the ETI are sufficient for the effective performance of the projects is to some extent a question of “how long is a piece of string?”. It is likely that all the institutions would have accepted and found ways to spend more money. But there are limits to absorptive capacity, and this and value-for-money issues suggest that the ETI budgets are broadly in line with the needs of innovative projects like these. Most of the projects are quasi-pilots in nature. With pilots it is important to control the size of the project so that it can be more easily evaluated and improved before wider roll-out.

Very few teams have mentioned shortage of funds as a factor. Where they have, it has been for specific, unforeseen, activities. These should be argued on a case by case basis. Where more resources may be most needed is in the handful of projects that are languishing and where further injections of outside support are indicated.

Inputs from SAIDE and other external resource persons

SAIDE intervention has chiefly come in the form of

- A watching brief and occasional programme-wide visits.
- Workshops on topics that relate to specific projects – both implementation and research.
- Follow-up support by email and phone.
- Fact-finding about Moodle configuration and use.
- Liaison and support for particular research initiatives.

The most obvious intervention vehicle has been the workshops; and the biggest cluster of workshops has been for Moodle use and e-content. Workshops in this area are offered as a one-off, or as a series with increasing specificity. Among those projects that have so far experienced only one workshop, several intend to commission a follow-up.

There is universal satisfaction with the relevance and quality of the Moodle and e-content workshops. Some have been not been delivered in optimal circumstances – e.g. length reduced at the institution's request, problems with technical set-up, poor or inappropriate attendance – but these things do not detract from the intrinsic quality of the intervention. Most project spokespersons told me that the workshops were essential launch pads for the projects. The offline Moodle model that was offered for use after some of the workshops was also said to be very helpful to participants as a reminder, and as a resource for personnel who did not attend.

The few criticisms were about what was seen as the excessive generality of the initial workshop format, but these critics were quick to acknowledge that for most attendants, the wider contextual and pedagogic issues in the workshop were important.

Other workshops have had mixed success for a variety of reasons. The multi-media workshop at UDSM was said to be much too general to generate specific capabilities. The technical workshop at UJ was hampered by technical set-up problems. The workshop on action research at UCM has led to some take-up of the practice; while the research workshop at UEW does not seem to have led to much momentum in the baseline project there. The OER workshop at UCM was largely a waste – but because of the poor attendance and lack of institutional follow-through, not because of any intrinsic problem with the workshop.

Follow-up support by SAIDE personnel is much appreciated. There appears to be some uncertainty about the extent to which this is available, at what cost and the mechanisms for mobilising it. This applies in particular to distance support. More clarification about this would be useful.

SAIDE face-to-face interventions are inevitably periodic. At some institutions – such as UJ and the Common Research Methods course project at KU - they have helped to generate self-sustaining momentum. In these cases the institutions are taking responsibility for decisions about whether, when, and from whom to commission more support. At other institutions this type of momentum has been less evident and further interventions from SAIDE seem to be required. The reasons behind this contrasting picture are complex, and there is no clear message at present for SAIDE in the way it offers its support services in the implementation projects. But more focused capacity-needs assessments during Part A might have highlighted where more sustained interventions by SAIDE were appropriate.

The model of support for the research projects seems to need attention. The detachment of CET from active engagement with the ETI has meant that support for research has been somewhat ad hoc. There is not the same type of watching brief and potential consistency of intervention for the research projects as for the others. This may be a factor in the chronic challenges two of them are facing, and a threat to the success of the second research project at UEW when it gets fully underway.

One aspect of SAIDE support that enjoys universal approval is their administrative services. They are described as responsive, appropriately persistent, friendly and personal.

One final SAIDE intervention needs to be mentioned: the inter-institutional workshops. The first workshop took place on the cusp of Part B in February 2010. There is no doubt that it served its primary purpose of contextualising the individual

programmes and projects – giving the institutions a perspective on what they were proposing to do and giving them a sense of belonging to a collective effort. Some of the content sessions were said to have been useful, particularly the one on OERs.

The workshop did not make a difference in two areas that are integral to the original ETI concept: the proposed overarching research project and inter-institution networking and collaboration. These components of the ETI – and the reasons for the inter-institutional workshop's lack of impact on them - will be addressed in later sections.

The second workshop took place in March 2011, after the first draft of this interim evaluation was circulated. Judging from the exit questionnaires, ad hoc feedback from participants and direct observation, the event added much greater value. The main factor in this is probably timing. Participants brought to the workshop at least a year of experience of working with ETI projects. They knew much more about their strengths and weaknesses, were able to engage more meaningfully in discussions about what is needed in the final phase and to share their experience to date with others.

The complexity and scope of projects

The projects vary considerably in their complexity, innovativeness and scope. Larger projects usually have larger teams, but technical support and overall project leadership are finite resources. Other things being equal, we should expect larger, more complex projects to move more slowly than smaller, simpler ones.

There is plenty of evidence that this rule has been operating in the ETI. At KU for example, the online EMBA has a long way to go. This is partly because it started late, but also because it is a complex and ambitious project without precedent in the ETI and in its region. By contrast, the digitisation of theses is a much simpler project and, apart from the resolution of a copyright issue, has reached completion.

The MAK e-Portfolio project is moving at a more cautious pace than the e-Content counterpart, again because it is taking a road less travelled.

The sheer number of items of e-courseware being developed can make a difference where support is limited. UDSM, as we see below, are facing some challenges in processing a larger than anticipated number of courses. UCM however are developing a more devolved, cascading, support process in their e-courseware project that may be more effective in some circumstances than a centralised one.

Changes in scope

In a few cases the scope or direction of ETI projects has changed. The most notable examples are:

- UCM's digitisation of distance education materials.
- Mobile phones for distance education at UI.
- Both of UDSM's e-courseware projects.

In UCM's project the principal objective has shifted from simply converting paper-based materials to CD for easier delivery to distance students, to fundamentally improving the quality of the materials prior to digitisation. This is a result of a growing awareness of the quality dimension which UCM attribute to the ETI. Beyond

this, UCM commissioned SAIDE to conduct a fundamental review of their distance education operations with a view to a longer-term programme of improvement beyond the scope and lifetime of the ETI. These developments have changed the timelines and the nature of the ETI project outputs.

The mobile phone component of UI's project for distance education has also fundamentally changed. The original proposal was to use mobile phone messaging and voice services to complement tutor interaction. Now UI are exploring a mobile delivery platform for a much wider range of learning services. This has inevitably changed the momentum of this part of the project. The radio component, in contrast, has been progressing as planned.

UDSM's ETI governance committee decided early in the life of the two projects – both concerned with e-courseware – that their scope needed to be expanded. Targets for e-courseware to be produced or improved were doubled. A curriculum review was also set in train within the IT course project. This has increased the workload of the programme personnel but, considering that, they do not seem to be experiencing serious collateral effects.

Changes in mid-project, provided they are adequately resourced, are to be welcomed because they are a reflection of the constructive use of action research and strategic reflection.

Inter-institutional networking and collaboration

One of the ETI objectives is to "promote collaborative knowledge creation and dissemination". Part A was intended to lead to "a network of researchers and practitioners established across participating institutions".

The Part A evaluation reported that the network had not yet started to function, and although attempts were made by SAIDE in the inter-institutional workshop in 2010 to broker network activity and collaborations - and an online forum was set up - nothing significant came of it.

Until the March 2011 inter-institutional workshop, there had been very little inter-institutional activity of any sort. The only examples I am aware of are:

- Participation in an ET advocacy workshop at UI by two academic staff from UJ (none was a member of the UJ ETI coordinating group)
- Participation of the MAK ETI coordinator in the Conference on the Application of Information and Communication Technologies to Teaching, Research and Administration (AICTTRA)[8] at UJ in September 2010. He presented a paper on the importance of systematic approaches to the planning of ET. There is a proposal for a return visit to Makerere.

It is not altogether surprising that networking did not gain momentum immediately after the 2010 workshop. Many of the projects did not get underway until a month or more after the 2010 workshop, so there was not much of substance to discuss in the immediate aftermath. Forums tend to fall into disuse if momentum doesn't gather.

[8] Sponsored by Obafemi Awolowo University, Nigeria and the Carnegie Corporation

Collaboration works best face to face, at least initially, and again there were no emerging products to work together on for many months. Exchange visits are expensive and take time, and with tight budgets and busy timetables, teams may have been reluctant to devote resources to collaboration without a clear benefit.

The picture should be different now however. The 2011 inter-institutional workshop presented much clearer opportunities for collaboration, or at least reasons to network. There was explicit encouragement of exchange visits where a "business case" could be made. Planning for several collaborations was set in motion grouped into a number of thematic clusters:

- Factors impacting on use of technology
- Impact of the ETI on the institutions
- Case studies
- Sharing best practice and learning from each other on mobile technology and other media
- Quality improvement

In an ideal world, these collaborations could be relied upon to sustain themselves through the final year of the programme and beyond, but, given the fact that there was little or no momentum before the 2011 workshop, it would be sensible for SAIDE to monitor progress, and selectively prompt and offer support.

Research

AN ETI objective is to "Research and report on educational technology activity in African universities by means of a long term project". Part A was intended to set in train a "coordinated research programme" comprising "local-level research activities conceptualized and developed under the auspices of an overarching set of questions".

In the end, only four dedicated research projects emerged from the Part A process – three contextual and one evaluative. Two are at UEW, one at MAK and one at UCM. There has been no progress towards the envisaged coordinated research programme under the "overarching set of questions".

The Part A evaluation rehearsed reasons why both the number of institutional research projects was limited, and why the overarching research project had not taken shape. The hoped-for revival of interest in research after the 2010 workshop failed to materialize. The reasons are complex and will be analysed in the summative evaluation.

The interest in the institutions in deeper involvement in research was never strong and subsided to, at best, a slow simmer once the pace of research promotion slackened. SAIDE personnel have approached ETI coordinators with a view to engaging participants in other research activity. Two papers – not as many as envisaged - are being developed within the ETI for a special edition of Distance Education[9]. Papers are being prepared for e-Learning Africa. Other ad hoc support is being given, but this does not amount to a coordinated research programme.

[9] The Journal of the Open and Distance Learning Association of Australia

Research might have played a bigger role if new people with research experience in the institutions had been brought in from outside the current projects; but with most of the current project personnel, their main interest is in implementation of ET, so it was always a case of pushing water uphill. There is insufficient interest in the overarching research programme originally envisaged by CET for there to be any value in reviving it in what remains of the ETI. Other relevant collaborative research however should continue to be encouraged. The 2011 inter-institutional workshop generated considerable interest in practical collaborations, which now needs to be rapidly harnessed. The proposed collaborations are mainly for evaluative research, with either a case study or transversal focus. A few are for product development.

Monitoring and evaluation

Monitoring and evaluation are integral processes in any project. Properly designed and carried out, they should lead both to improvement and accountability during the course of the project; and wider learning, as well as final accountability, when it draws to a close.

In the ETI, M&E are seen primarily as developmental processes. The programme is innovative – unprecedented in some respects - and there is much to learn about how to optimise this type of programme what is eventually achievable.

During the projects, action research is encouraged on how they are progressing, alongside specific monitoring of the quality and effects of the products (the e-courseware etc). In the final stages of the projects, summative evaluation of each project, as well as the overall experience and benefits of the programme at each institution, will contribute to a better understanding of what is achievable in ET for teaching and learning – and how this is done - in these types of institution. These will be the main research outputs from the ETI. A summative meta-evaluation will pull them all together.

All the institutions have M&E in their project plans, although they vary from project to project in their intensity and degree of structure. The institutions have to report every six months on progress. This is intended to be more than accountability – it should trigger a reflective, action research process which identifies successes and challenges and suggests improvements.

With few fully-fledged products in use, it is early days for the M&E of project quality and effect. But detailed plans for this should be in place. From what I can see at this stage, these detailed plans are the exception rather than the rule, and institutions will have to work hard to put them in place in the coming weeks.

There is not much evidence from the six monthly reports of action research taking place. UCM's latest report is probably the best example. This does not necessarily mean that it doesn't happen elsewhere – I know for example that two of the KU projects (Online EMBA and Common Research Methods) are using informal action research processes - but the results are only cursorily being presented in the institutions' reports, which means the institutions are not recording enough detail about their journeys.

Each institution needs to articulate expected outcomes from the ETI. This is required in the ETI logical framework which should be revisited now that the projects are in mid-term. Each project should also define the outcome(s) to which it is contributing. This helps to orientate the project team, and prepare for the projects' summative evaluations which should address outcomes as well as outputs - e.g. what is the evidence of the benefits the project has produced, not just what are the products?

Early outcomes

The following set of five outcomes was agreed in 2009 as the ones to be expected from the ETI.

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.

These are the principal outcomes we expect to see by the time the programme ends in mid 2012, so it is early days for them. However, even in the Part A evaluation, a number of "green shoots" were identified in some institutions. These were recorded as:

- More interest in, and commitment to, ET for teaching and learning in the institutions.
- A better understanding in the institutions of what ET can do for teaching and learning.
- A better understanding in the institutions of how to develop ET strategies, plan projects and put together funding bids.
- Increased team work across faculties.
- Higher visibility and status for ET units.
- A better understanding in SAIDE-CET of how to support capacity development in ET for teaching and learning.

I cautioned in the Part A evaluation that these were not fully triangulated – verified - findings, but were worth noting nevertheless.

The interim evaluation did not set out systematically to assess progress with outcomes. It is too early to focus seriously on outcomes when the outputs in the form of e-courseware, research, etc are not yet fully developed. This will be a major focus in the summative evaluation. But some observations about outcomes are worth making at this stage.

The section in this evaluation on success factors and constraints looked at the status of ET strategies in the institutions. Although all the institutions have drawn up strategies - the majority thanks to the ETI – none of these strategies has been fully adopted and operationalised. It is generally too early therefore to look for indications of the effectiveness of these strategies such as a significant increase in the budget for ET.

ET strategies

There are a few examples of new strategic decisions about ET being taken by senior university management since the ETI began – such as at MAK. However it is not generally possible to say without further evaluative research to what extent the ETI may have contributed to them. Exceptionally, a strategic decision has been made to increase resources for ET at UCM which seems to have been triggered by the intense interest in ET created at the Beira campus of that university. The new spending on ET will come from an enhanced ICT budget funded from a new student levy.

Improved teaching and learning practices

Improved teaching and learning should flow from the ETI products – provided they are of sufficient quality - and the capacity building that enables them. Pace is beginning to pick up towards this outcome and should accelerate more in the final phase of the programme. This outcome should be a key focus of the institutions' summative evaluations in 2012.

Improvements in productivity

Productivity improvements will be less easy to measure, but important nonetheless. The three resource digitisation projects – two at KU and one at UCM - should produce more easily measurable productivity benefits.

Community of practice

The active community of practice around ET for teaching and learning has not yet materialised, at least at an inter-institutional level and beyond. The reasons for this were examined in an earlier section.

New transferable knowledge about ET

The ETI is not just developing capacity in the use of ET for teaching and learning, but also beginning to create a better understanding of how to do it. Action research at the project level, periodic reflection by the ETI coordinating groups, participation in forums like the inter-institutional workshops and e-Learning Africa, and pan-institutional monitoring and evaluation will help us to build a more robust picture of this. Hopefully by the end of the programme, this picture will be something that can be disseminated to others.

Green shoots

The following is an expanded list of indications that the ETI will be more than the sum of its projects. These green shoot outcomes are, I caution again, only

indications at this stage, but worth recording. These and other possible outcomes will be explored in more depth in the summative evaluation.

- More interest in, and commitment to, ET for teaching and learning in the institutions. There is no doubt that this is taking place within the project teams, although not universally as a minority of participants have not maintained their commitment.
- Some ripple effects - for example at UCM (where the Nampula campus asked to be assisted to develop e-courseware) and UDSM (where two associated teaching colleges similarly applied to come on board) - but so far the projects have been quite contained.
- A better understanding in the institutions of what ET can do for teaching and learning. This is an emerging benefit reported by some of the teams, especially those that carried out sensitisation activity. I have not been able to corroborate it.
- A better understanding in the institutions of how to develop ET strategies, plan projects and put together funding bids. In most institutions, ET strategies have been on ice since the end of Part A – UCM is an exception – so there is little to report on this aspect. The teams have generally not engaged in project planning or bidding in Part B.
- Increased team work across faculties. This is a continuing process and benefits are consolidating. There have been some examples of poor team work, from which it is hoped lessons will also be learnt.
- Higher visibility and status for ET units. Provided the projects go well, this is likely to continue to develop as an outcome.
- A better understanding in SAIDE of how to support capacity development in ET for teaching and learning. Action research takes place in SAIDE too, and there is an explicit recognition that this programme may lead to a step change in understanding about to support capacity development in ET.
- Greater awareness of weaknesses and capacity needs. There is no doubt that many people in the ETI teams have become aware that learner-centred education, the effective application of ET, and some other key activities such as research, project management and M&E are difficult and that they have unmet capacity needs in some of these areas. This is a prelude for learning and developing. There is much more realism about capacity among the ETI personnel.
- Considerable progress in meeting some of these capacity needs. This is reported on in earlier sections.

Conclusions and the way forward

The big picture

The ETI is a relatively modest programme with an immodest vision. It expects to see increasingly effective use of educational technology to address educational challenges facing the higher educational sector in Africa. The extent to which the programme on its own will contribute to this is not predicted. But the programme's internal logic suggests that it will not be a drop in the ocean.

The ETI's core intervention is direct capacity building and provision of modest financial resourcesleading to a small number of quality ET products. These products, although potentially valuable in themselves, are also important for two other reasons:

- As vehicles for the practical application of the programme participants' newly acquired knowledge and skills.
- As exemplars to inspire and guide others.

The programme's logic suggests there should be replication or multiplier effects locally through the efforts of the capacitated personnel and the demonstration value of the products. There is also an expectation that the whole experience of the ETI will influence policy and strategy in the participating institutions, and have wider effects through networking and the dissemination of – mainly evaluative – research.

The implementation section (Part B) of the programme is nearing its half-way mark. It is well into the direct capacity building phase. During the visits for the interim evaluation and at the second inter-institutional workshop that followed in March 2011, there was ample evidence that, at all seven institutions, participating personnel have taken the all-important steps from (a) understanding the value of ET to (b) learning how to apply it and (c) beginning to put that knowledge into practice.

No institution has withdrawn from the programme. Only one project out of 26 is currently inactive. In all the other projects there is momentum which, despite challenges, is already leading to ET products such as e-courseware and other tangible improvements. More will undoubtedly emerge from the pipeline before the programme is over.

These are significant achievements for a programme that relies largely on self-directed progress in the participating institutions. SAIDE, the programme facilitator, is on hand with advice and training, but ultimately it is the institutions that dictate the direction and the pace. This is not easy in a domain which is a green field for most of the participants.

Programmes like the ETI depend heavily on the motivation of a small number of people. Work on projects and coordination of the programme as a whole mostly goes on in the margins of people's jobs. This is a source of strain, even without the intellectual and technical hurdles of working in a new domain. The level of energy and commitment during second inter-institutional workshop provided clear evidence that motivation is high among the majority of participants despite these challenges, and augurs well for the final phase of the programme.

Nuances and underlying factors

The last section set out the big picture at this interim point in the ETI Part B - and it is a positive one. This section draws conclusions about the most powerful factors behind this positive picture. It also looks at the main qualifications and nuances to the picture and their proximate and underlying causes.

The biggest single factor in the progress of the ETI is the commitment and professionalism of programme participants. The ETI is dependent chiefly on the programme's intellectual and social resources at each institution. No amount of financial resource or external support would be able to make up for deficits in those areas. Although there are considerable variations in ET experience and expertise, the level of commitment and professionalism among the institutional teams has been relatively consistent. In the long run, this is the more important factor.

<u>SAIDE support</u>

External support from SAIDE has reinforced this base of commitment and professionalism and helped developed its capacity. SAIDE's model of non-intrusive - though persistent - facilitation and support was recognised as a success factor in Part A. SAIDE support continues to work very well in most areas of the programme. The model is recognised as empowering by the programme teams. Its intermediary role between the institutions and the funders is particularly appreciated. There is no doubt about the quality of the Moodle and e-content workshops provided by SAIDE. In the area of research, SAIDE support has been professional but not persistent enough to make up for the capacity weaknesses in the institutions.

Local support structures

Staff engaging in ET, particularly for the first time, need local support structures. The models for this differ among the institutions. The one that seems to be the most effective is where

- There is strong ownership of the projects by academic staff.
- They are actively networked with peers working on similar tasks.
- They work in close partnership with specialist technical staff.

The majority of the institutions approximate to this model.

Capacity

All institutions have found the learning curve in the development of e-courseware, and some other types of ET application, steeper than they had expected. The majority of projects are behind schedule and capacity deficits seem to be the main factor in this. Most projects will complete their activity schedules by the end of the ETI, but quality may be an issue, and there is a risk that effective evaluative research will be squeezed in some cases through lack of time. Quality and evaluation need particular attention in the final phase of the ETI.

Animation is a particular area of technical challenge and those institutions incorporating animation in their projects will need additional support.

Project coordination

With a minority of projects, coordination and communication challenges have been factors in their slow progress. The ETI at each institution was conceived as a coordinated programme and not a collection of independent projects. This is mainly because of the innovative nature of the domain – the teams need to pool experience and expertise, both what was there at the start and what is being acquired as the projects unfold.

Although there are examples of projects that are prospering with confident, visionary leadership, the ETI seems to be working best where there is close coordination, regular reflection and communication between as well as within projects. Conversely, projects at two or three institutions have suffered from weaknesses in these processes.

Wider institutional factors

The ETI programmes operate in generally benign institutional environments. Senior leadership and the wide policy and strategy frameworks are not obstructive, and in places positively enabling. In at least three cases, central funding for ET, through ICT budget lines, has improved since the ETI began. ICT itself is improving in most institutions.

Governance of the ETI is not universally hands-on, and in some places lacks structure. These factors have led to slippage in a few cases.

Another area that needs senior leadership attention is the reward system for academic staff. Nowhere does it appear to adequately recognise staff efforts in improving teaching and learning through ET. Time is a universal challenge, and although there are no simple solutions to the strain on participant staff that follows from involvement in programmes like the ETI, institutional leadership needs to do more to recognise the efforts that staff make and the benefits to the institution from them.

Networking and collaboration

There has been very little inter-institutional networking or collaboration to date - apart from the annual workshop arranged by SAIDE - despite this being an explicit objective of the programme. It is difficult to tell whether the institutions would have benefitted from more networking or collaboration in the first year of Part B. What is clear from the progress made at the March 2011 workshop in scoping this type of activity is that there is considerable latent demand for it. It will need coordination and support from SAIDE.

Research

Research has not gained much traction in the ETI so far. Only four of the 26 research projects centre on research, and three of these are not making as much headway as expected. Although there was some interest in research among the participants at the outset, it was not sufficient to be a serious competitor to the “implementation” projects for the finite resources. There was – and still is – insufficient research experience and expertise among most of the institutional ETI teams for research activity to be self-supporting. A proposal for a long-term research project - one of the original ETI objectives - was presented by CET at the first inter-institutional workshop, but was not taken up. Other research has been somewhat fragmented.

Renewed interest in collaborative research of a more practical, mainly evaluative, nature was generated at the second inter-institutional workshop. With sufficient support, this may have a better chance of gathering momentum, developing capacity and producing useful research products.

The way forward

Most of the projects still have a lot more work to do. A small number still have to provide more capacity building to enable members to press ahead with the outputs. The projects which are planning to deploy animation have to find a way to overcome the technical challenges, which may mean intensive professional development and/or buying-in expertise. This is also true of the two infrastructure-intense projects at UI. Two of the research projects still have methodological hurdles to overcome.

The majority of projects however have a clearer path to the finishing tape. Mostly, the priorities in the final phase are:

- Completion of the planned quota of outputs.
- Improvement of the quality of those outputs (especially where they are "evolving" products like e-courseware).
- Summative evaluations
- Dissemination of the ETI experiences.

Quality

Of these priorities, quality improvement is probably the highest. This is both for the benefit of the users, and because the products will be treated as exemplars. None of the institutions yet has a well-developed quality framework for ET in terms of an agreed set of standards and robust processes for reviewing products against it. This is understandable in a new field. Quality assurance so far has mainly been applied *ad hoc* through "expert" review. If the review harnesses appropriate expertise, this is probably the best short-term solution; but by the end of the ETI, a more robust quality framework should be in place. All the institutions should focus on this in the final year of the ETI, drawing on external support if necessary.

One way of improving quality is through peer networking. The networking and collaboration proposed at the March 2011 workshop is ambitious and will need focused coordination.

Much of the proposed networking and collaboration also centres on evaluation and other types of research. Although this will be largely summative in nature, planning for it needs to begin now. Evaluation needs to be resourced. It also depends on monitoring and action research activity that should have begun earlier. If it hasn't, it is not too late to start now.

Post-ETI

There is no possibility of further investments in the PHEA ETI as the Partnership has already come to an end. The momentum created by the programme and its projects must continue if the value is not to be dissipated. There is ample evidence that, in the short run at least, the momentum will be self-sustaining and that, without significant new resources, the people capacitated by the programme will help others to engage with ET for teaching and learning. Demand, from students at least, is likely to apply pressure for further development of ET.

This however will be largely dependent on the commitment and effort of the individuals currently involved. The institutions cannot rely on them forever, and more sustainable structures and processes need to be put in place. The best vehicles for this are the educational technology strategies which were drafted in Part A of the ETI. These should be reviewed and updated, and the process of institutional adoption begun in earnest. This sequence of actions should start before the ETI is over so as to benefit fully from the network.

P J Spaven
April 2011

Annex A
PHEA-ETI Interim evaluation

Topic guide for interviews and group discussions at the institutions

Project level

I find it best if project teams start by telling me the story so far of their projects in their own words and own way. This usually covers most if not all the points I'm interested in. If not, I ask more questions.

These are the main points:

1. Progress with activity milestones and actual products (e-content etc)
2. Quality of the products. How you assure quality.
3. Can I get access to the products?
4. Capacity building – what has happened? Has it worked? What gaps remain (if any) and how you propose to fill them?
5. The level of buy-in by staff beneficiaries.
6. Successes: what are you most pleased about? How are you building on that?
7. Obstacles: what have been the main obstacles; what obstacles do you foresee from now on; what are you doing about them?
8. How are you monitoring the project? How do you intend to evaluate it?
9. Have there been any unexpected results – e.g. knock-on effects?

Programme level

1. Programme coordination and project management.
2. Programme governance,
3. Senior management – how supportive?
4. ICT infrastructure and equipment.
5. Demand for ET – staff and student attitudes.
6. Procurement issues.
7. Synergy with other programmes and projects in similar fields.
8. Locus and status of the unit that manages the ETI.
9. SAIDE inputs: workshops, remote support, the website.
10. Any budget issues.
11. Research in ET
12. Inter-institutional collaboration
13. ET strategy and the role of the ETS.
14. Programme level M&E.
15. Wider effects of the ETI
16. After the ETI

Annex B
PHEA-ETI interim evaluation
Topic guide for interviews with SAIDE personnel

1. What involvement have you had with the programme – direct and indirect -since Part B began in March 2010?

[For those who have delivered workshops and other developmental activities]

2. How did the activities go organisationally? What do you think this says about the institutions? What can be done to help the institutions improve on any deficits?
3. How effective were they in achieving their objectives? What are the factors behind this? What would you do differently in any similar activity?

[For all]

4. What are your impressions of progress at the different institutions you have had contact with? What are the main factors (success factors and obstacles) behind this? What do the institutions need to do to improve on any deficits?
5. Inter-institutional collaboration seems to me to have been the exception rather than the rule. Is this your experience? If so what do you think are the reasons for this?
6. There appears to have been no material progress on trans-institutional research. What are your thoughts on this?
7. What aspects of progress – or lack of it - are common to all the institutions you have had contact with?
8. How would you sum up progress in the programme as a whole compared with your expectations in March 2010?
9. Are there any emerging lessons for this type of programme?
10. Are there any other issues that need to be surfaced at this stage?

Annex C
PHEA ETI Part B Interim Evaluation
Abridged institutional visit reports

Report of Visit to Makerere University 12-15 January 2011

Introduction

The visit to Makerere was the first in this interim evaluation round.

My 2010 visit raised some serious concerns about the programme at Makerere. In particular, institutional leadership was in flux and issues around that were pre-occupying senior management. Also interest in the ETI among teaching staff had waned, and the coordinating team lacked a broad base.

I am pleased to report that these two principal concerns have all but disappeared. The new Vice Chancellor, although not substantively confirmed in his post, seems, with his team, to have a firm grip on the university's strategic direction. As a former Dean of Computer Sciences, he has moved ICT development – including the application of ET - up the agenda. For example he has allocated more resources to IT equipment for staff and students. In the Business Plan he presented in his candidature for Acting VC, he signaled his intention that Makerere should "embrace ICT in teaching, learning and assessment. Every member of staff should in a short space of time, be trained in e-learning and go on to develop at least one course fully on-line.

It has proved to be more difficult than expected to operationalise this plan, and there would no doubt have been quality issues with production of e-content on this scale in such a short time. With continuing severe resource problems, the necessary capacity building will not happen overnight. But the VC's plan represents an environment of expectation in which the ETI is seen as a solution – albeit a small one – and not as a distraction from university politics.

E-learning has its own budget line. It is now seen as a utility to be centrally funded, and not something which is the responsibility of academic units. The E-Learning Unit has moved to better premises. The unit will be moving to a new Centre for Teaching and Learning – essentially a pedagogic support facility - to be located in the College of Education[10]. It will no longer be located in the Institute for Adult and Distance Learning. There have also been discussions about an eventual move to the office of the DVC (Academic). Wherever it resides, it needs more resources. It still has only two staff: Tito the head of the unit and Abigail the LMS manager. They have too much operational work – e.g. running workshops - to operate at a fully strategic level. Although they are making impressive efforts.[11]

Staff interest in ET is said to be increasing, partly out of a recognition of its importance for the university. The new VC has put a lot of effort into improving the reputation of the university (which has been at a very low ebb), and staff on the whole are said to be supportive. They are keen to improve Makerere's position in

[10] Makerere is currently reorganising itself into Colleges which will have more autonomy e.g. for HR and finance.
[11] Tito's participation in the UCT CET Masters course in ICTs in education is paying dividends.

the global ranking; and good web presence – including by active e-content - is a factor in this.

Student demand for e-content continues to grow, although it is not always translated into active participation as some of the experience so far in the e-content project shows. Laptop ownership continues to increase.

Limited bandwidth and shortage of equipment are still constraints. Accessing the LMS from outside the campus Ethernet is very slow and prone to disruption. This can discourage course developers as well as student users. This was complained of much more during my current visit than last year. This in some ways is a good indicator because people are expecting more of ICT as interest in ET grows. But the last 6 months or so has experienced reduced internet functionality in Kampala due to problems with ISPs and equipment failure at Makerere. These factors are bound to improve in the longer term.

In September 2010, Makerere fully operationalised a QA unit in the DVC(A)'s office. The head of the unit was part of the initial ETI group. There is said to be a good dialogue with the unit.

The ETI working environment has also improved. Now that the projects are well underway, they have attracted sufficient numbers of active participants – in fact more than was originally envisaged. They work autonomously, but benefit to some degree from being part of a programme-wide group which has met roughly every three months up to now.

Governance operates chiefly through the Director of Planning. When he is in post he is said to be hands-on. He enforces deadlines; has ensured that each project has its own budget so that overspends on one don't harm another; and has been able to resolve some intra-programme management issues. He was however on leave from August to November, and has only just re-engaged with the ETI.

One of the main general lessons learned across the projects is that activity almost always takes much longer than planned. This includes finding time yourself, synchronizing activity with colleagues. But planned activity is also vulnerable to unexpected outside events such as bureaucratic delays, and collateral effects of university politics. The unexpected should be seen as normal and built in to project timetables.

The projects

E-Content

At its outset in February 2010, the project aimed to develop and operationalise quality e-content across five Makerere units on the university's Moodle LMS platform. Capacity-building would be an essential precursor; and, following evaluation of the project process and products, internal guidelines for developing courses and a paper for wider audiences would be produced.

The submission for Part B listed the following outputs:

1. A report identifying eight courses that lend themselves to conversion to e-courses and staff to lead the development of the materials. This report will

also indicate the programmes of study and the categories of students involved.
2. An overview map/document of the eight courses to be converted into e-courses with details on the scope (notional hours), outcomes, content, methodology, assessment strategy etc. to guide the development of the materials.
3. 160 notional hours within the 5 faculties of e-courseware and accompanying e-content, student activities and assessment tasks.
4. An evaluation report with recommendations for revisions to improve e-courses and e-content that reflects the needs of students and staff after development of the first round of courses has been completed.
5. Institutional guidelines for setting up and designing e-courses.
6. Twenty well trained staff members across five faculties. These staff members will provide for a network of academics that can collaborate with other colleagues on future projects relevant to teaching using e-content and a LMS.
7. A conference paper.

By the beginning of 2011, the project is roughly on track with its activities. This has involved some catching up with time lost due to the late release of funds, and difficulties in scheduling activity involving a range of participants with crowded timetables.

Team building

All participants are volunteers. Frustration at the delay led to the loss of some members from CHS. But the first of Brenda's workshops is said to have galvanized interest among participants and created momentum. The loss of members has been more than compensated by the attraction of participants from new units: Library and Information Science, Veterinary Medicine, Agriculture and Fine Art. This was substantially due to active advocacy by project members, especially Philip.

This ripple effect - beyond expectations - is a very good interim result, and a lead indicator for the momentum that it is hoped the project will generate for the post-project future.

Informants said that once people became engaged with e-content development they stayed on board. Despite the hard work, they soon realized that it would benefit them in the long run, including in time saved by easier or less face-to-face work. There was no going back. The challenge was to get people engaged in the first place.

Capacity building

There have been two externally-led workshops, both by a SAIDE consultant. Although I have not yet seen her workshop evaluations, opinions among the Makerere informants were very positive. There was the inevitable difficulty of finding an appropriate level in the first, predominantly introductory workshop, for the range of experience of the 24 participants. There was also some resistance from people who had used Blackboard to convert to Moodle. But the second workshop took all of its 16 participants beyond their pre-existing capabilities. One participant with previous experience of Blackboard said it turned him "into an expert".

The consultant continued to support workshop participants by email, which is greatly appreciated; and she left them with a model for course content which is being used to help other staff who want to develop e-content.

A new wave of staff training in e-content is being rolled out – Tito and Abigail left to lead a two day workshop in Jinja during my visit. This time, encouragingly, it is funded centrally by the university and not by a donor. It is said to be a response to pressure from students – who pay an ICT levy - for more e-learning material.

More development workshops are envisaged in the next ETI stage. To ensure sustainability, experienced staff should be deployed systematically to develop other colleagues in their units. This is already happening ad hoc within the ETI, but is essentially voluntary and is limited by clashes with other commitments. It may need to be built more formally into timetables

Products

To date, nine courses – or course elements – have been launched on the LMS; with another 3-4 nearing the end of the pipeline. They have been critically reviewed by university staff with pedagogical design experience – although mostly not experience in e-content design (there are still very few of these at Makerere). The NADEOSA QA framework was offered by Brenda Mallinson and is said to be in use by the reviewers.

I was able to review all of those currently on the LMS. They all reflect experience from the SAIDE workshops, although none embraces the full scope of learning tools available on Moodle and offered in the workshops. Some courses present only static content, although it seems well structured, and consistently enlivened and contextualised by announcements from the lecturer. For distance students, even access to static material is a great benefit. (Three of the 9 courses developed so far are exclusively or partly for distance students.)

The majority of courses also have one interactive element such as a quiz, uploading of assignments or forums.

Level of engagement by students varies. The number of students who sign up for e-content varies from 43 to 711. But this tells us very little. Active engagement is a better indicator. Students have embraced assignment uploading and have engaged with graded quizzes.

Most forums have had no participants at all apart from the course tutor. In contrast, a module within an information technology course for BComm students – on computer security in organizations – has attracted nearly 4700 contributions. The difference here is that the lecturer positioned the forum as the central learning experience and content source, and students were assessed on their participation.

These examples demonstrate the importance of incentives for engagement, and also show that Makerere students can get round internet access and bandwidth limitations when the need is paramount.

There are no examples of video, largely due to bandwidth constraints. There has been no live chat or other real-time activity. Timing for both sides is said to be a constraint, but this should be no different from other locations where it works, both for campus and distance students.

The second 6 monthly progress report asserts that draft evaluation tools have been produced and that learning and assessment activities for e-content, focusing on outcomes as well as content and notional hours – are ongoing. However it is clear that there is still a lot of work to be done on this. This is acknowledged by the project team which plans further activity in this area in the next 6 months. They are having conversations with other ETI institutions about e-metrics to track student inter-activity.

This will need to be complemented with systematic feedback from users – staff and students – about the experience of developing and using the e-content. Quality needs to reflect the user perspective and this needs to go beyond actual numbers using the material. There is no alternative to surveying the users, but experience and capacity in this area appear to be very weak. Help will be needed. It would seem sensible to coordinate this effort across the ETI .

A step further would be a controlled evaluation of performance of students on e-content courses compared with conventionally delivered alternatives. But this would be challenging to design and almost certainly not feasible within the time frame of the ETI.

Time constraints are one of the main factors holding people back. Quality e-content development takes longer than people think. A minority overcome this through sheer enthusiasm. Others need incentives. There are inadequate incentives at Makerere for devoting time to developing good course content, compared for example with publishing academic papers. This is acknowledged by HR management, but will need further active advocacy.

The project is also producing an animated e-guide to Library services, initially on CD but eventually for posting on the LMS. This is the only example of e-content being developed for CD, an option that may be appropriate in other contexts.

E-Portfolios

In its submission for Part B, the project defined e-portfolios as “electronic collections of evidence of performance / learning assembled, managed and developed across varied contexts over time by a student in collaboration with a lecturer / mentor”. E-portfolios encourage accurate documentation of field experiences by students, reflection on this experience, and timely communication between students and lecturers.

The aim of the project was to support the University’s intended shift from teacher-centred to learner-centred instruction, fostering greater levels of problem-solving and reflection among students. E-portfolios can structure the learning process itself, although there is a danger that its dual role as an assessment tool could also distort the learning and documentation process. This is a difficult duality to manage.

The following outputs were planned:

1. A portfolio structure / template to be used in this project
2. Installed software for the construction of e-portfolios by students
3. Staff trained on the use of e-portfolios
4. Students trained on the use of e-portfolios
5. Documented staff and student experiences

6. Contributions to institutional policy on e-portfolios for teaching and learning
7. An internal seminar on the lessons learned in the project
8. A conference paper

The project is considered to be about 3 months behind schedule with software testing and user training shifting to the first quarter of 2011. Delays have been chiefly due to scheduling difficulties and some unanticipated complexities of the project.

The project is challenging. There are few precedents for e-portfolios in higher education, especially in Africa. The project has received no substantial outside technical assistance, but has relied largely on Andrew Mwanika's technical know-how, and the intuitive common sense of the other team members.

Scope

This would present difficulties if the project was pioneering only one contextual application, e.g. the original notion of the documentation of, and reflection on, field experiences by clinical students as a learning and assessment tool. But the project has diversified to include

- A second context for student output documentation and reflection (the ICT Faculty).
- The development of postgraduate staff teaching skills; and the facilitation of research supervision.
- What amounts to an interactive staff record template for use by the HR function.

There are benefits in this diversity over and above each application's intrinsic value. If the project is well evaluated, it should demonstrate where e-portfolios can contribute most, in relation to the costs and effort of development and application. This will be of benefit to Makerere and also to outside audiences if the findings are disseminated as intended.

There are also potential dangers - highlighted in my Part A report – of the dilution of effort and loss of focus. The project team, particularly Andrew its leader, has devoted a great amount of time and effort to the project so far, including a long period of exploration of the contribution it could make to HR. This is water under the bridge now and all four/five applications should continue to move forward; but another similar project starting up should not bite off more than it can easily chew.

Products

It is too early to assess the quality of the products. They are still in development and have not been put to use, other than some pre-online piloting by the ICT faculty. It is also difficult to define quality standards because of the innovative nature of the products. In fact one of the outputs from the project should be a set of quality criteria, although this will need to be an evolving tool as experience of the e-portfolios grows over the coming years.

A very important focus over the next weeks and months is the design and development of monitoring and evaluation tools and their deployment once the portfolios have been launched. This, as I suggested above, is a more important requirement for this project than most others in the ETI because of its innovative

nature. This process should be systematic and thorough. For those applications that will be launched later, it should not be hurried. In fact they can learn from the first wave of M&E.

The process should begin by identifying evaluative research questions and move on to designing tools for answering them. This will benefit from outside help. Andrew may seek help from his Maastricht colleagues, but may also look to ETI personnel.

Gender Research

The Part B submission stated that the project would "investigate whether and to what extent gender influences perceptions, uptake and use of educational technology amongst staff and students at this university. The project will consider the reasons for and possible impact of this influence. Where possible, the project will make recommendations for change and improvement in both policy and practice."

Although evaluation of research projects is relatively unusual, there is scope for reviewing the rationale and focus, the process of designing and mobilizing the research, the quality of the research tools, the research output (basically the report and what it tells you about the analysis) and the dissemination process. Research outcomes – the use made of the research by others – can also be evaluated.

I reported on the first two elements after my Part A visit to Makerere. There is no change in perspective this time. The rationale is strong. There has been much research on gender factors in ICT use in Africa, but nothing specifically for ETs except in South Africa. The research will therefore contribute to closing a wide gap in understanding of ET deployment and take-up.

The team also foresees some collateral benefits. One is the capacity development of the research assistants. This has undoubtedly been an outcome. It will be important to help them build on their experience with this project.

Two other potential benefits were mentioned. One was that the research will raise the profile of ET at Makerere; the other was that its publication will raise the profile of Makerere itself. These two benefits remain to be seen.

Participation of research targets and of potential users is important in the design stage. This appears to have happened in this case. The design stage has also involved iterative small scale piloting.

The process of mobilizing the research has been affected by the delayed start because it depended on sequential windows of opportunity for the research, some of which were quite narrow. If one was missed, it set back the whole project. On the other hand, this project has a relatively short timetable, so the delays probably will not affect the project's effectiveness.

I have reviewed the research tools, and whereas there are small points of detail I might take issue with, overall they appear to be fit for purpose.

What is important now is that the research report contains clear and persuasive recommendations for action by the university; and that findings of interest to wider audiences are disseminated in appropriate forums.

General issues

Networking and collaboration

There has been one substantive collaboration. Tito participated in the 2010 Conference on the Application of Information and Communication Technologies to Teaching, Research and Administration (AICTTRA)[12] at Jos in September, presenting a paper on the importance of systematic approaches to the planning of ET. The Jos team said that he had had a considerable impact and was asked to chair the drafting committee for the conference communiqué. There is a proposal for a return visit.

Apart from this there has been little networking of significance with other ETI institutions, and no substantive collaboration since the beginning of Part B. The view of one of the coordinators is that this needed facilitation by SAIDE-CET team.

One ripple initiative is worth mentioning. Two of the participants in the e-content workshops went on to conduct a similar workshop for several Mozambique government officials.

Educational Technology Strategy

No action has been taken on the Educational Technology Strategy (ETS) since the end of Part A. Makerere take the view that the concrete elements of the ETS are the projects, and until they are concluded and evaluated, there is no substantive conversation to be had with the university senior management about an ETS.

Given the other pre-occupations at Makerere at the present time, I would endorse this approach, although I think it would be beneficial if the team revisited the ETS – in the light of the projects and a review of prevailing success and risk factors for ET - in the final three or four months of the ETI, with wider university involvement, and possibly outside facilitation. This could be a pan-ETI effort.

Research

There has been no movement at Makerere on an overarching research project. They were expecting an initiative from CET following last year's JHB workshop, but as none came, they are working on the assumption that the focus should be on evaluative research in the projects and the gender study.

Makerere would have been open to participation in a wider research project if it had been clearly articulated, planned and funded at the outset. Now they feel it is too late.

SAIDE support

They continue to be satisfied with the support they have had from SAIDE. They were particularly pleased with Brenda Mallinson's e-content workshops. They feel that more help with M&E will be needed in the next phase.

[12] Sponsored by Obafemi Awolowo University, Nigeria and the Carnegie Corporation

Report of Visit to University of Education, Winneba 17-20 January 2011

Introduction

The visit to Winneba was the second in this interim evaluation round. I received a copy of Winneba's second six-monthly report before my arrival which was a great benefit. The report was comprehensive in its rescheduling of all three projects, which was also very useful. The report lacks analysis of issues faced and any comment on the ETI overall. However, much of the visit was spent discussing challenges facing Winneba, particularly around scheduling and risk, as well as achievements.

The visit included a lively discussion of the two research projects with most of the research staff and officers from Externally Funded Projects Office (EFPO). Most were not well-prepared for the meeting because they had not seen the six month report. Circulating this is the responsibility of project leaders and should be routine in my view.

All the projects are substantially behind the original schedule in the ETI submission. For example in Project 1 the research questionnaires were to be administered to staff and students in April 2010. In the new revised schedule this is due to happen in February 2011.

In Project 2, the Moodle LMS was to be installed on the server and operational by July 2010. Moodle was configured and operational on temporary equipment in November, pending the availability of the new server which is about to be commissioned. However there have been serious technical problems with the temporary equipment which has severely limited functionality.

Project 3 is dependent on the progress of Project 2, and revisions to the original schedule are entirely for that reason.

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There were delays to the start of the projects largely outside the control of the teams. Work commenced in April instead of January. The remaining 4-6 months adjustment to the scheduling has a number of causes, including procurement problems in Project 2 (see the Projects sections below).

The original scheduling of the projects in the ETI at Winneba was ambitious and did not taken into account the difficulties faced by staff trying to multi-task. It did not build in time and other contingencies for unforeseen occurrences like the unexpected absence of the project leader, or strike action. Finally it has not looked closely enough at the complexities of tasks such as – in Project 1 - conducting surveys and analysing the data.

We concluded during our discussions that it was important for there to be a designated deputy for each project – someone either in the project, or outside but in the programme team - who is in the picture sufficiently to be able to take the project forward without delay in the event of an extended absence of the project leader.

The delays in the three projects have had differential impacts, which will be described in the project section below.

Budgeting for the three projects seems to be very tight. Budgets were trimmed somewhat to accommodate Project 4. This should not result in compromises on quality and the team is urged to seek top ups from the university's own budget where necessary.

There is a consensus that enthusiasm for the use of educational technology has grown since my last visit 16 months ago. More students are bringing laptops onto the campus, motivated by improvements in ICT. It is thought that more staff are interested in engaging with ET, although the evidence is anecdotal. The response to the advocacy workshop seems to have surprised the team. Interest came from subject areas across the board.

ICT is taking a big step forward through a university-funded improvement project, covering both equipment and connectivity, which is nearing completion. Separately, the VC has told all departments to acquire data projectors for teaching and learning.

Governance

The first level of governance is through the involvement of the EFPO in the programme team meetings and the monitoring of progress. Their involvement is extensive. This has not prevented the slippage but I detected that there have been some frank discussions between them. There may be a dilemma in the close involvement of the EFPO. They may identify too closely with the programme team – a version of Stockholm syndrome - and find a detached governance role difficult. More serious perhaps is the risk that the EFPO's role in fronting the liaison with donors and their representatives weakens the sense of accountability among the project teams.

Above the EFPO, there is the Grants Steering Committee (GSC) which meets quarterly to hear about progress on externally funded projects and programmes. However it rarely picks up on delays like the ones in the ETI, mainly it seems because the volume of paperwork it is given can be overwhelming. Consequently it has asked to meet project leaders face to face on a six monthly basis from now on. This is a promising development

Project 1: Baseline study on current state of educational technology at UEW

The Part B Submission described the project's main purpose as the provision of empirical data to inform the strategy and implementation programme of educational technology at UEW. In the short term the preliminary findings of the research were intended to inform the overall strategy for Project 2, including the "relevant training required, and selection of the 10 to 20 courses that will be mounted on the LMS". Because of the delays in Project 1, this opportunity has been lost, even allowing for the delays in Project 2.

There was also a suggestion that the research would provide baseline data for assessing the impact of interventions like the ETI. This would require a similar survey at a later point to track the change, which however is not in prospect under the ETI at least.

The following outputs are anticipated from the project:
1. Available data on educational technology systematically codified;
2. Research report on educational technology status and use at UEW;

3. Recommendations for improving educational technology access and use and suggestions for institutionally driven implementation of educational technology interventions at UEW.

Project 1 has made very slow progress in the 10 months since it started. Research staff are in place. A literature review is almost complete, although some re-organisation is still required. The need for an inventory of educational technology at UEW has been partially met by a parallel project on improvement of ICT facilities, but it seems that more work needs to be done. The main survey instruments have been designed with the exception of the interview guides. The detailed mapping of survey deployment has yet to be conducted.

The main issue in the Project 1 timetable, apart from the delayed start, seems to have been pressure of work, particularly on the project leader, leading to delays in critical events in the research development process. With research projects, delays usually have a magnified knock on effect because they lead to the loss of windows of opportunities such as the availability of students for piloting; and the difficulties of rescheduling meetings with multiple stakeholders. This knock-on effect has been a factor to some extent in Project 1, although it does not explain the whole picture.

I do not think the answer lies in appointing and funding an external project manager. It is important for sustainability that projects like these are owned by permanent staff. Amelioration – partial at least - lies in more realistic and far-sighted planning, with risk analysis and contingency thinking.

By far the bulk of the work is yet to come:

- Design of the interview instruments
- Detailed decisions about survey deployment and the preparation of a guide
- The survey piloting
- The main survey itself
- Agreement on a conceptual framework for data analysis and the research report
- Data entry and analysis
- The drafting of the report.
- Consultations on the draft report and finalisation
- Dissemination of the report
- A short evaluation report on the project as a whole, drawing on recorded reflections on the processes that should begin right away.

We discussed all of these activities in our meetings. In the latest revised schedule, they are all due for completion by end June 2011. This is unrealistic. Even if everything went to plan – with no hitches – a quality research exercise on this scale would need longer. There will be hitches. A 9 month timetable would be more realistic. This should not lead to any slackening of momentum - in fact it is essential that the pace quickens, to ensure in particular that the motivation of the research staff – already endangered by the delays - is not lost.

It is important to look collaboratively at the implications of all the steps as soon as possible and plan ahead. For example, if the team want external help in reviewing the draft report, they will need to book that soon.

It is very important that the research staff operate as a cohesive team. Their dispersal around the different campuses makes this difficult, so extra efforts need to

be made. They should all be kept regularly informed of progress in different parts of the project. Although the staff felt that communication and role assignment were generally good, the call to the evaluation meeting had caught them by surprise, and they had not seen the second six monthly report.

Every opportunity for face to face meetings should be taken. There have only been 2-3 full meetings so far. I appreciate there is a cost involved, but if there is any flexibility in the budget, provision for more plenary meetings should be made.

Full use should be made of expert advice on survey and analysis issues which should be turned round with speed.

The project has potential to be very useful in the medium term, despite the loss of the opportunity for complementarity with Project 2. There should be some synergies with the analysis stage in Project 3 however, and this will be helped by the duality of roles of research staff.

Project 2: Enhancing the quality of teaching and learning through the use of a Learning Management System

This project involves the deployment of a learning management system "for the purposes of augmenting face-to-face instructional modalities, strengthening the quality of distance education programmes, and improving the efficiency of present teaching and learning strategies"[13].

The main steps are

1. Recruit and develop technical staff
2. Procure and commission a server
3. Acquire, install and configure Moodle and Adobe multi media software
4. Development of two pilot courses to be partially deployed on Moodle, including one component each to be entirely on-line.
5. Deployment of the pilot courses.
6. Advocacy activity designed among other things to identify academic staff for wider exploitation of Moodle. If more than 20 want to take part – as is anticipated – selection criteria will be needed.
7. Capacity building and support for the development of a further 10 courses (20 staff)
8. Deployment of the 10 courses
9. Adaptations to Moodle and courses, based on learning from action research (in association with Project 3)
10. An institution-wide strategy for integrating Moodle into teaching and learning processes and outcomes
11. Evaluation of the entire project (in association with Project 3)

The project has only fully completed steps 1 and 4[14]. However the server has arrived and is about to be commissioned. The installation and configuration of Moodle should follow very soon. The pilot courses should therefore be launched in time for the new semester in two to three weeks time. Advocacy has started and can be completed once there are courses to demonstrated; and that should lead, through the

[13] PHEA ETI Part B submission

[14] A third course – part of the BComm curriculum - has been developed alongside the two ICT courses, although it will not play a full part in the action learning cycle.

necessary staff and course development, to the deployment of the 10 courses in September 2011.

In other words the latest revised timetable seems realistic to me, provided there are no major setbacks. The biggest risk, it seems to me, is to the consistent availability of the project leader. It is essential therefore that someone else is equipped to take over in his absence, without significant loss of momentum.

The delay to the project was been triggered by problems in the procurement process. Procurement of the server – as I understand it - required at least three bids from a shortlist of approved suppliers. As long as one of the bids matched the cost allocated in the budget, it was likely to be recommended by the Tender Board for approval by the VC. This process usually takes between 2 and 4 months depending mainly on the timing of meetings of the Tender Board. On this occasion, the bids were all over the budget figure, so that the process had to be re-run. An acceptable bid was eventually obtained but the opportunity to launch the pilot courses on a stable server for the autumn semester was lost.

I discussed the issue with the university's Pro Vice Chancellor and separately with the Director of Finance. They both stressed that the procurement procedures are clear – enshrined in statute. Like them or not, they are unavoidable. Problems like Project 2's – and apparently they are common - result from a failure to plan for the hurdles the procedures pose.

In the absence of the new server, the courses were mounted, first on an ordinary PC and then, after technical problems, on another server. Here too, technical problems were experienced and data was lost because back-ups were not kept. Very little access to online material was available to the students, so the piloting – and its action research and monitoring under Project 3 - will be started again in the spring semester.

The team recognises the importance of back-ups. Surprisingly, no provision for backup equipment was made in the project budget, but I was assured that money will be found somehow.

What I cannot assess at the moment is the quality of the products. They were not accessible on-line during my visit. I was told that they have been reviewed at some stage by SAIDE personnel. No other QA mechanism is in place. They will however be monitored and evaluated through the Project 3 process. It is important that lessons are fed back.

There is a need to be clear about how the comprehensive evaluation of Project 2 will take place. This is addressed under Project 3.

Project 3: Investigating how academics/students use web based approaches to enhance teaching and learning

This project is aimed primarily at exploring, through an action research approach, the use of Moodle by two academics who are responsible for the pilot courses in Project 2.

The Part B submission stated that the study would "explore how use of Moodle affects teaching practices and learning experiences in these courses".

The submission anticipated the following outputs from the project:

1. Search conference (literature review) report
2. Two lecturers' journals.
3. Student focus group instrument; feedback sessions transcripts; student evaluation forms.
4. Research report.

Project 3 is up to date inasmuch as it has gone as far as it can in keeping pace with Project 2. The literature review is up to date. The training in action research has been conducted. It is primed to facilitate the action research for the pilot courses.

There seems to be a lack of clarity about the scope of the research under Project 3. Although the submission refers to exploration of learning experiences, direct contact with students, through for example focus groups, is no longer in the frame. It is proposed to capture student use of Moodle through other means: electronic logging of behaviour and on-line course evaluation. If designed well, these instruments will be useful, but I think it is a mistake to dispense with direct research among students. It would be good if an inexpensive way of doing this – such as self-journaling by a sample - could be found.

The team did not seem entirely clear to what extent the staff responsible for the 10 new courses will join the action research process, and if they do, whether any formal training could be provided.

At least one of the researchers has engaged with the people responsible for the implementation of the LMS itself, conducting a proxy light journaling process.

There does not however seem to be a comprehensive plan for the monitoring and evaluation of Project 2, either through Project 3 or in some overarching manner. It would be good to map out all the necessary and feasible elements of that evaluation as soon as possible and decide who will take part and when. It would make sense to harness Project 3 entirely for that purpose.

The Project 3 team were proposing to extrapolate from longitudinal study of student grades. However, without a controlled experiment – which would be very difficult and probably unpopular because of its ethical implications – the variables are too many to draw valid conclusions.

A possible Project 4

A fourth project - to create an OER repository – is in the pipeline. I read the proposal which is about to be sent to ETI management for review prior to the approval process. It is an ambitious project with far-reaching implications. It has been enthusiastically received by the VC.

Its 24 month timetable seems realistic provided it is well-managed. This will take it beyond the notional end of the ETI, so some sort of budgetary finessing will be necessary. I doubt if the project as a whole could easily be squeezed into the remaining 17 months or so of the ETI-proper. If the June deadline is hard, the project will have to be pared down.

Whatever happens it will be challenging. The designated project leader Rev Dr Edwards – who is a Research Fellow - is new to educational technology. But he has

more time than teaching staff and doesn't lack enthusiasm. He will need to work closely with colleagues in the other projects.

Careful consideration should be given to the effect engagement with Project 4 might have on performance of the other three projects, which so far have been beset with challenges.

General issues

Networking and collaboration

There has been no direct networking or collaboration at all with other ETI institutions. Project 4 was based on UCM's model, but this was conveyed through Andrew and there has been no direct contact.

There seemed to be no expectation of collaboration, even after the JHB conference with its suggestion of an LMS group. UEW would benefit from lessons learnt by the other institutions on LMS exploitation.

ETS

No concrete action has been taken on the Educational Technology Strategy (ETS) since the end of Part A. But, as reported above, a parallel ICT equipment and infrastructure project has been pursued. Furthermore the ICT Management Board has asked Dr Yidana to draw up a plan for the further development of ET, to be implemented from September 2011. This will draw on, develop and – as he put it - "operationalise" the ETS.

It would be useful if UEW share their experience in this process in real time with ETI partners.

Research

There has been no movement at UEW on an overarching research project. At JHB last year, UEW signed up for the proposed project and offered help with the proposal to extend the baseline research model. But as they have not been approached, they took no action.

SAIDE support

UEW continues to be satisfied with the support they have had from SAIDE. They said that Monica's visit had been a wake-up call and also broke the back of the survey design work

They have also received support from Andrew and Tessa both through visits and on-line. They are happy with both. Tessa "opened their eyes" to the complexities of aspects of Project 2.

Report of Visit to University of Ibadan 24-27 January 2011

Introduction

The visit to Ibadan was the third in this interim evaluation round. The team was putting the finishing touches to its second six month project reports and I received them all while I was there. This note, and the discussions it reflects, informs Ibadan's programme level report which will issue shortly.

Progress

All the projects are substantially behind the original schedule in the Ibadan ETI submission, particularly Project 3 and the mobile part of Project 4. When allowing for the nearly six month delay in the start of the programme (the original schedule envisaged an October 2009 start), the delays do not appear so dramatic.

Furthermore, the delays in Projects 3 and 4 are mostly due to complexities and conscious changes in technology specifications. The technology involved in these projects is being funded internally and is therefore undergoing the university's normal due diligence which at Ibadan involved very thorough and time-consuming processes. The original project plans were unrealistic in not anticipating this.

The university has undergone changes which have - or may yet have – effects on the ETI. There is a new VC who is getting familiar with the programme. This may in particular affect decision-making on the equipment for Project 3, which requires his active approval. There are new Directors in the Distance Learning Centre and General Studies Faculty – bit of which are central to one or more projects. The university has moved to a new semester timetable which upset the timing of activities in projects 1 and 2.

A universal factor in project progress in Ibadan and other institutions is the difficulty team members have in reconciling their project responsibilities with their normal workloads, which in most cases is not reduced to allow for project work.
A minor innovation, not envisaged in the original plans, is the engagement on an ad hoc basis of PhD student as a project assistant across the four projects. This takes some of the load off the programme coordinator and project leaders, but not of the group members.

There is no doubt that squaring this circle requires strong motivation. Levels of motivation of team members tasked to develop e-content have been an issue in Projects 1 and 2. This should be helped by a change in the assessment framework for lecturers which will come into force later in 2011. Teaching quality will account for 30% of credits, whereas now only publication determines promotability.

Timing – as well as time - is also an issue. Where people need to work collectively – e.g. in meetings and workshops – convening them can be very difficult. One of the reasons Projects 1and 2 have progressed more slowly than anticipated is that they have attempted to work as plenary groups. The programme has now disaggregated the project teams into sub groups, based on individual courses or activities. This should enable them to be more agile. It will also make accountability for delay or poor output more transparent, which should spurt them on.

Whatever the reasons for the delays, the teams will have to accelerate their activity if the projects are to be completed satisfactorily before the ETI deadline. The project representatives and the programme coordinator said they were confident this would happen.

Institutional factors

Ibadan has a big incentive to invest in ET: the large numbers of students enrolled on its courses, particularly compulsory ones like General Studies. They simply cannot be accommodated satisfactorily with conventional face to face teaching. It also has a large distance learner population. Finally it is aware of its role as a standard bearer for quality in university education on Nigeria. This will drive the adoption of ET forward sooner or later. The ETI is a good opportunity to test-drive the motor in a controlled environment.

Ibadan, uniquely among the seven ETI partner institutions, does not have a home – even a temporary one - for the development of Educational Technology. This is not sustainable in the longer term. The university is proposing to create a centre for pedagogical support - including in educational technology – in the Education Faculty. This is probably a more appropriate home for educational technology than an ICT department – less danger of the technology tail wagging the teaching and learning dog. If all goes well it will help to institutionalize ET. The notion for centre for pedagogical support emerged from an initiative under the Macarthur grant for improving pedagogy.

UI is also putting in place a quality assurance unit – for all types of university activity - probably operational by June 2011.

These innovations, including the Research Management Office, reported below, will take time to bed down and may not have a significant impact on the ETI. But they offer potential for sustainability, as well as the risk of unhelpful bureaucratic interference.

Prof Ayo Oluleye, the ETI coordinator has quarterly programme level meetings with the key players, plus frequent ad hoc meetings with the project leaders. He is fully aware of what is going on. He is not particularly concerned with the pace of development in the projects – apart from Project 3 perhaps. Ibadan he says typically begins projects in a circumspect, highly consultative way. At a certain point they accelerate. He believes Projects 1 and 2 are reaching that point.

Ayo sees the ETI as a part of a long-term process for transforming teaching and learning through the use of ET. The ETI is the demonstration phase, so it needs to present an effective and attractive face.

The ETI at Ibadan doesn't have a dedicated governance arrangement. Ayo submits progress reports to the Deputy Vice Chancellor (Academic) who chairs the Committee of Provosts and Deans. But this arrangement does not amount to an effective oversight regime because of the volume of other business these senior colleagues have to deal with.

However Ibadan is putting in place a Research Management Office which will soon take over governance and troubleshooting of programmes like the ETI.

Power is an enormous challenge for Ibadan. They have coping strategies, but they are all costly. ICT is insulated for the moment.

Projects 1 and 2

The issues for Projects 1 and 2 are very similar, so I am reporting on them together.

Project 1
Capacity Building and Digital Content Development

This project is aimed at building university staff capacity to develop and/or source digital content, and make effective use of this content for teaching and learning. Two faculties, Faculty of Education and Faculty of Pharmacy, the General Studies Unit and the College of Medicine, are involved.

The following specific outputs were anticipated from this project in the 2009 Submission.

1) 68 academic staff introduced to possible options for digital content development and packaging and provided training on use of PowerPoint, web applications such as Drupal and Joomla, and use of Moodle.
2) 12 technologists trained to develop simulations and animations, to manage web applications such as Drupal and Joomla, and Moodle.
3) Awareness of e-learning raised, through:
   a) Radio jingle developed to create awareness of e-learning strategies and the PHEA project.
   b) A flyer on PHEA and e-learning strategies for teaching and learning;
   c) At least 500 academic staff in eight Faculties to be reached at the Special Faculty board meetings to create awareness of the PHEA project;
   d) An e-learning exhibition to raise awareness of e-learning and PHEA projects hosted, and at least 500 staff and several hundreds of students attend e-learning Exhibition.
4) 12 digital learning packages on identified courses developed.
5) Project evaluation report

Project 2
Open Courseware Development for Science and Technology

The 2009 Submission stated:
"The project is aimed at the development of open courseware for a small selection of existing University of Ibadan science and technology courses. Open courseware particularly suited to the University of Ibadan's curriculum will be developed by adapting existing course content where possible and developing new content where necessary. The open courseware will be deployed initially for use by teachers and learners within the university, and ultimately, by interested teachers and learners throughout the world."

The following outputs have been defined for this project:
1) Report on sensitization of 250 lecturers, through faculty boards, on open courseware development.
2) 20 academic staff members are trained to become open courseware developers.

3) Open courseware developed for 5 courses in year one and another 5 courses in years two and three of the PHEA ETI project.
4) Courseware for 10 courses deployed on the university intranet and internet.

There have been two SAIDE-facilitated workshops – in September and January - where members of Projects 1 and 2 have come together for training in courseware development. The first was designed to capacitate participants to develop both templates and course content. It was expected that by the second workshop, originally scheduled for November 2010, the content would be complete and ready for review. This did not happen despite the workshop being postponed till January.

Templates have been created, but progress with content has been patchy. With Project 1, even in January 2011, 75% of courses were less than half way to completion. About 50% had only just got started. In Project 2, virtually no progress has been made on content. Low motivation, as well as time and timing difficulties, was reported to be a significant problem.

It might be argued that the main aim of the projects is capacity building and that content production is a by-product. But capacity needs to be applied to take root, and it also needs to be evaluated through application.

The workshops are reported to have been very important for providing spurs to activity as well as capacity. The second workshop, in the absence of completed content to review, focused on creating a potentially valuable quality assurance tool.

Unfortunately attendance, at the second workshop in particular, was far from optimal. However, the project leaders believe that enough key people have participated to carry the projects forward and transfer their skills and experience to the other players in the 12 courses. This remains to be seen and will be an important factor to assess in the project evaluation.

As has been mentioned above, the subgroups are now working and reporting separately, which should give them more focus and make their progress more transparent. But also, to get away from the obstacle of the “day job”, the teams are being taken in February on the first of two retreats to immerse themselves in content production. The retreats will be opportunities for the participants who are furthest ahead to help the others, possibly setting in training a mentoring process. These would seem to be ‘make or break’ events for the sub-groups who are further behind. If they fail to turn up or make progress at the retreats, there may be no point in their continuing in the project.

Outside of the core process of courseware development, most preliminary activity has been completed. But sensitization of senior university management has been postponed partly because of changes in position; and the university-wide exhibition is now scheduled for March when there will be completed courses to demonstrate. This delay will have a knock-on effect for the proposed multiplier training of 350 staff.

One subgroup that has been created and detached from the core process is what could be called a research and evaluation group. This consists of staff who have led on the needs assessment process for students and both academic and non-academic staff, creating on-line questionnaires. This in itself is an interesting development. The

intention is for the group to also be converted into monitor-evaluators for the two projects.

The core Project 1 output – e-content for 12 courses – may not have time to run through two cycles before the ETI terminates in mid-2012. This will affect the depth and therefore usefulness of the evaluation[15]. It is even more important that the evaluation is well designed and conducted rigorously.

Project 2 now plans to develop all 10 courses at the same time, but with staggering of the user testing. The greatest concern they have is about the process of transforming content from the Moodle format to what is required for OERs. They will need support in this.

Project 3: Tele-Classroom Teaching in the General Studies Programme

This project aims to tackle the challenge of delivering quality teaching to students taking General Studies courses which, being compulsory, are the largest in the university. Lecturers, who are co-opted from other departments, have to rotate among classrooms. Motivation and quality suffer.

The project will set up a tele-classroom at the General Studies Programme Unit, with LCD TV output in selected lecture theatres. Classes will be facilitated by tutorial assistants and there will opportunities for some interactivity through on-line question submission.

Those delivering the lectures will be selected for their subject expertise. They will also be coached in performance. The lectures will be recorded and copied onto DVDs for distribution, e.g. to distance students. In time they will be uploaded to Moodle. There will be a potential academic staff development effect.

Specific outputs identified in the part B submission were:

1) A classroom at the GSP Unit equipped with:
    a) A satellite link for transmission of video and audio signals,
    b) Audio and video equipment;
    c) A teleconferencing system;
    d) Software for slide presentation;
    e) Video conferencing software;
    f) Lapel microphone; and
    g) Backup power.
2) Four lecture theatres equipped with projection screens big enough for 50 students, with speakers, wireless microphones, and backup power
3) Training report on training in developing teaching materials, delivering and facilitating learning through tele-lecturing and fulfilling the technical requirements to support tele-teaching. The following people will be trained:
    a) 50 GSP associate lecturers;
    b) 7 project team members;
    c) 24 tutorial assistants;
    d) 13 technical staff;
    e) 5 camera men;
    f) 5 audio visual technicians.

[15] Ayo said they intend to conduct second cycle evaluations after the ETI ends, which will be useful for the university but too late to feed into the summative ETI study.

4) GES101 and GES 104 courses delivered through tele-teaching.
5) Audio-visual materials produced on DVD and mounted on LMS / UI Open Courseware portal.
6) Project evaluation report.

The project is well behind schedule. The 2009 Submission envisaged the equipment being acquired and training conducted within three months of the start. Delays are partly due to changes in personnel at the Distance Learning Centre - which is a major stakeholder not least because it offered to pay for the costly equipment – and the supervisors of the two courses chosen to be pilots. Dr Peace Babalola continues to lead the project despite having started a sabbatical which will see her spending much of her time away from Ibadan. This suggest that the project team is somewhat fragile, although there is no doubting Dr Babalola's motivation.

The main reason for the delay is that the equipment specification is more complex and costly than envisaged. The spec is still being finalized (I was told it should be ready for submission to the VC in two weeks). Meanwhile there is a proposal from elsewhere in the university to broaden the scope of the project to encompass campus-wide video-conferencing throughout. This would delay the project by months, if not a year or more, which would take it out of the scope of the ETI. The team is keen to press ahead and will be arguing the case for seeing it as a pilot for the wider plan.

Whatever the merits of the wider plan, Project 3 has great potential for immediate impact on a major challenge. If it works well with General Studies, there should be replication for other courses with very large numbers. It would be a loss if it were set back any further. There is a moderate risk it may not come to fruition.

The project team has been moving ahead with some activity in the meantime. There has been some sensitization; liaison with Lagos State University who film their general studies lectures; and some work on "chunking" courses for broadcast. The timetable is now very tight, even if the equipment is approved in February. There will probably only be time for one semester's delivery before the ETI comes to an end, with a weakening of the evaluation potential, as in Project 1.

Project 4
Use of Educational Radio and the Mobile Phone for Tutorials in Distance Learning

This project seeks to create access to learning resources and provide student support using two different technologies; radio broadcasting and the mobile phone. It is easier to treat them as two separate sub-projects projects even if they both impact on distance students.

The first sub-project will leverage the university's radio station to deliver tutorials in the Departments of Economics, Psychology, and Political Science, critical departments that account for the majority of distance learning students. When fully operational, the tutorials can be syndicated for national coverage on Radio Nigeria. The radio tutorials will complement other existing modes of educational delivery including online learning. The plan is to script and deliver 50 courses for radio. The broadcasts will also be available online as audio files.

The mobile phone sub-project originally aimed to provide two way SMS and voice access to tutors either individually or in groups via tele-conferencing at designated distance learner access centres. The latter idea has been put on a back burner but the scope of mobile communication envisaged is now greater, involving the delivery of more complex content, including multi-media.

The outputs envisaged in the 2009 Submission were
The project will achieve the following outputs:

1) 100 lecturers in the three departments in the faculty of the Social Sciences trained on the use of radio in delivering DLC tutorials.
2) 2 hours of radio broadcast time daily for a whole year delivery of 50 courses at 100 and 200 levels.
3) Course materials are available in MP3/MP4 formats and on the university website.
4) Reduced student drop-out rate in the three DLC departments as a result of the more flexible use of time, location and space by radio broadcasting & access to digital materials accessed via cell phones.
5) 500 DLC students enrolled in the Closed User Group.
6) Log of students sending and receiving SMS.
7) 10 quizzes delivered via SMS.
8) Two questionnaires to gather perceptions of teaching and learning through radio and mobile phone.
9) Project evaluation report.

Outputs 5-7 are now being revised in line with the expanded scope of the mobile sub-project.

The radio sub-project is probably the most straightforward part of the ETI at Ibadan. It has moved beyond the preliminary and training phases into script production. The 6 day residential script writing workshop in August is said to have been effective and created momentum.

Nearly half the scripts have been handed over for editing and it is anticipated that all will be ready for voicing at the beginning of March. The project started late along with all the others, so the timetable has generally shifted by about 6 months. This still allows for all elements – included the evaluation - to be fully completed by the end of the ETI.

The mobile sub-project is still immersed in negotiations over a platform and local service provision. This has been extended mainly because of the increasing scope of the project. There is a need to find a cheaper service provider than an existing arrangement with Starcomms.

The project does not expect to begin use of mobile learning until late August 2011. This will provide only one semester for monitoring and evaluation which will limit the evaluation's potential.

It may have been better to start off incrementally with some low tech mobile activity, instead of waiting until "all the ducks are in a row". It may not be too late to do this.

General issues

Networking and collaboration

The team agreed in JHB last year to look for opportunities for collaboration with their Jos counterparts. This materialized through an invitation to a small group of Jos staff to contribute to an awareness raising workshop on multi-media at Ibadan. In the end, none of the Jos coordinating team was able to go, but two colleagues with experience in this area – including Prof Liverpool – were able to participate. There has been some email contact since then.

There has been no other collaboration or networking of any significance.

ETS

No further action has been taken to formally adopt the ETS per se. But it has helped to frame sections of a new University Strategy which is nearing completion; and the university's first ICT Policy which will be embedded in an extension of the university's ICT strategy, also nearing completion.

Research

There has been no movement at Ibadan on an overarching research project.

There will be an emphasis on evaluative research facilitated by the group referred to above who conducted the needs analysis.

SAIDE support

Ibadan continues to be satisfied with the support they have had from SAIDE and its resource people.

Report of meeting in Abuja with the University of Jos coordinating team 28-29 January 2011

Introduction

The meeting with the Jos coordinating team in Abuja replaced the intended visit to Jos a week later. The security situation in Jos indicated that it would not be a good environment for the evaluation visit.

Although the meeting was restricted to the coordinating team, their familiarity with the projects meant that we were able to have a thorough review of progress. Having the team's undivided attention for nearly two days was a bonus.

My impressions of the ETI at Jos are very positive for several reasons. Chief among them are these.

- The coordinators function very well as a team, complementing each other with their diverse backgrounds and interests.
- There is a high level of commitment to the development of ET, stemming from an informed view[16] of its potential, and an institutional culture that tacitly encourages innovation (even if it is not necessarily rewarded in tangible form).
- Interest in ET among the academic staff is broad-based.
- The teams deploy the ETI and Carnegie inputs in a strategic, complementary manner.

There is a seriousness of purpose in the Jos team which I have not found elsewhere to this degree on my tour so far.

The ETI projects have made relatively good progress at Jos. There have been setbacks, but the teams work out ways to overcome them. Dependency on the SAIDE consultants is relatively low.

Management of the ETI at Jos works at three levels. The coordinating team[17] aims to meet fortnightly to review progress. This is an informal, collegiate arrangement, often taking place off campus. The team stresses the importance of regular meetings to maintain momentum and iron out wrinkles before they become ridges - a lesson from their Carnegie experience.

There is now a middle level team of 12 consisting of the coordinators plus one representative from each participating department. This was put in place because plenary meetings of all the project teams (which are made up of 4-5 staff from each participating department, nominated by deans or heads of department) were becoming cumbersome. Project teams meet separately with one member of the coordinating team with specific responsibility for that project. Projects are supposed to report monthly, although in practice it is often every two months.

The Jos team regards sensitization as very important – particularly to secure buy in from faculty members who might otherwise feel excluded and resentful. This is

[16] Jerome Dooga's participation in the UCT CET Masters in ICTs in education is paying dividends.

[17] This is currently reduced to 4 in practice as Dakas has new professional responsibilities.

another lesson from their Carnegie experience. They are rolling out sensitization activity faculty by faculty. It is behind schedule but they will carry on. Sensitization is a continuous process.

Senior management is also a target for sensitization. There is a largely new senior management group whom they are planning to take off-campus for a day (although they are struggling to find funds for this). They are also hoping to send the VC to E-Learning Africa, with cost-sharing from Carnegie. The VC will be leaving about that time, but at Jos the outgoing VC usually "midwifes" the new one during an extended handover.

The main objective with the VCs is to get them to support the establishment of an e-learning centre which to help with the institutionalization of progress made through the Carnegie and the ETI programmes.

They also encourage wide participation in technical workshops to promote inclusiveness. In the case of Brenda's workshop, the demonstration material is also freely available on line.

They have been planning a media event, which has now been postponed twice. Funding for this may be difficult.

Jos are now into their third and final Carnegie Tranche. It is a consolidation and sustainability phase with more of a focus on capacity and e-content than on hardware. Most of the coordinating team are also involved with Carnegie activity and are exploiting synergies with the ETI through shared funding and leveraging off each others' activity. For example, the ETI e-Fellows were able to participate in the AICTTRA[18] conference at Jos in September 2010 sponsored by Carnegie; and the ETI multi-media project will be using Carnegie-funded infrastructure.

The Jos model is a very good example of harmonization of external assistance.

The Jos team continues to find the VC supportive, even if he has not been hands-on recently. Student pressure to provide on-line content is growing, stimulated by experience of the early adopter courses, English and Maths. Carnegie has been funding student familiarization activity.

Staff involvement in ET through the ETI and Carnegie is more broad-based than at any other of the 7 institutions and is therefore being managed more strategically than anywhere else.

The team are using a Jos-based instructional design and multi-media consultant Obioha Adiuku-Brown (Obi Brown) http://insightafricaconsulting.com/ who has been contracted on a retainer through Carnegie and is providing technical training, advice and support to all three projects. The team is satisfied that he is qualified in these areas.

ICT infrastructure and equipment continue to improve. Jos is conscious of the need to live up to its strapline: "Jos a leading ICT University". Power outages continue to frustrate.

[18] Application of information communication technologies to teaching, research and administration

Procurement hasn't been a problem and is unlikely to be. The "virtual office" arrangement, set up through pressure from Carnegie, creates a fast track through procedures that can take up to a year. There are new staff in the office who need briefing so there may be minor delays. They have yet to buy a new server because they have been reconsidering the spec.

Project 1: Departmental Educational Technology Initiative

The project is designed to provide staff in four departments/faculties with skills to design content and deploy it on the University LMS. Through these pilot courses it is envisaged that the departments will demonstrate to others the opportunity that technology offers in transforming teaching and learning. The departments/faculties are Law, Computer Science, History and Arts.

The following specific outputs were anticipated in the Part B Submission:

1) LMS moved and installed on newly acquired LMS server.
2) Running of 5 workshops for 10 technical personnel on supporting the LMS over the three years of the project:
3) Acquisition and placement of two 6ft x 6ft smart interactive boards in two classrooms for highly subscribed courses and the courses that require live demonstrations.
4) Running of 2 hands on training sessions of four days each for technical staff on high-level coding in PHP and development of web applications for use with the LMS.
5) Series of 6 workshops that will train 60 staff members in 4 departments/faculties (equal number of participants per department/faculty) on issues relevant to teaching using e-content and the LMS.
6) Development of a total of 180 notional hours of content across 4 departments/faculties (Law, Computer Science, History, and Arts) of undergraduate e-courseware and the accompanying content, student activities, and assessment tasks.
7) Existing basic ICT Orientation Course enhanced with 2 new modules to introduce students to use of computers, with 500 students required to complete the course prior to accessing their courseware.
8) Setting up and commencement of 6 e-courses, with a minimum of 500 student LMS registrations and appointed facilitators, to be run using the institution's LMS.
9) 2 evaluation project reports with recommendations for revisions to improve e-courses and e-content that reflects the needs of students and staff after the first round of courses have been completed. The 1st report will be delivered after the first year of delivery and the second at the end of the project.
10) 4 case study reports, one from each department, also to be written at the end of the project.

The original aim was to have the first batch of 180 hours of e-courseware produced in time for the February 2011 semester.

Although straightforward in concept, this is an ambitious project in terms of the amount of training and content production. There have been setbacks due to strikes; a new procurement policy that held up Brenda's appointment to deliver her workshop; and the security situation in Jos which is disruptive of teaching and project activity and has also deterred external consultants.

The first pair of workshops were conducted in October, later than planned. There were problems with progress early in the technical workshop which meant that it did not get through its complete agenda (see section on SAIDE support). There are still some outstanding issues to be dealt with.

Content creation is not expected to start until the second workshops. These have been held up. The team have been in touch with Eric Clarke from the Royal College of Surgeons in Ireland, one of the original developers of Moodle, to deliver the next workshops, possibly both the technical and content development ones. Although Clarke has been deterred by the security situation, the team are planning on the assumption he will be persuaded to come soon. There are risks in this, and there needs to be a feasible plan B with a specific trigger point.

There was a certain amount of slack in the original timetable, but that is now used up. The team are determined to make up for lost time, but that will be difficult given the external challenges.

They are also determined to deliver quality outputs. No content will be uploaded until it is has been quality assured. QA will be through a combination of internal or external review by qualified people (inc. Obi Brown for interface design aspects), and pre-pilot testing. Members of the team have personal experience of developing content to a high standard, so it is likely that this will produce good results. The team are aware they need to move from this somewhat ad hoc approach to producing a QA framework with explicit standards. We agreed that Andrew would be able to help with that.

The team have just developed a mobile device LMS interface which I was able to use through my Blackberry, accessing Jerome's e-courseware for English with ease (not recommended for people with poor eyesight!). Paradoxically, none of the coordinating team has a smart phone. They need to acquire one or two ASAP for demonstration purposes - and for credibility with their students with whom smartphones are rapidly becoming the device of choice for accessing the LMS.

The English course I was able to access – which pre-dates Project 1 - seems to be a good example of interactive courseware, employing several different types of learning objects.

Project 2: Educational Multimedia and Simulations

The project is designed to capacitate staff in three departments – Microbiology, Pharmacy and Theatre - to design learning environments using digital simulations and multi-media, and have an opportunity to deploy a number of pilot courses to ascertain their effectiveness within the UniJos context. It is the intention of the project to provide staff with a model and the skills required to develop further multimedia courses in the future.

The following specific outputs were anticipated in the Part B Submission:

10) A series of 2 workshops that will train 5 staff members in 3 faculties (15 participants) on issues relevant to designing multimedia learning environments and simulations.
11) Running of 2 workshops for 10 technical personnel on developing multimedia. These workshops will cover issues such as:
    a) Coding for interactivity;
    b) Creating digital assets for teaching; and

c) Production and assembly techniques.

12) Development of 10 notional hours of content in 3 faculties (Pharmacy, Theatre and Microbiology) with accompanying content, simulations and assessment tasks. (project total: 30 notional hours). The simulation content focus for these notional hours will be:
    a) Microbiology: The Electronic Microbiology Laboratory (approx 10 hours)
    b) Pharmacy: The Electronic Pharmaceutical Analyst (approx 6 hours)
    c) Pharmacy: Digital Herbarium of Medicinal Plants (approx 4 hours)
    d) Theatre: Theatre of Development Virtual Classroom & Community (approx 10 hours)
13) Development of a 10-minute basic computer based orientation programme to introduce students to use of the electronic learning environments and simulations.
14) Expert review of materials and report from a usability point of view.
15) Pilot the material with a small group of students and produce pilot report.
16) Establishment and commencement of 4 compulsory online courses, with a minimum of 400 students to run for six months. Registrations and appointed facilitators to be run from the institution's LMS.
17) 4 monitoring reports that accompany training, development and deployment of the materials.
18) 1 evaluation project report with recommendations for revisions to improve this mode of learning that reflects the needs of students and staff members after the first round of courses have been completed.

The original intention was to deploy the courses from October 2011.
Project 2 will go through a similar cycle of activity to Project 1. Because it was intended to start later than Project 1, it is more or less on schedule if the initial delay in the release of funds for the ETI is taken into account. Obi Brown delivered the introductory workshop to about 50 people, an indication of the level of interest. Staff are beginning to practice on their laptops using materials found on the internet.

Project 3: E-Learning Fellowships

The project is intended to prepare selected academic staff to teach with technology and conduct research to improve technology for teaching strategies. Operating over a one-year period, the Fellowship provides them with programmed capacity building and the opportunity to apply the learning on a specific project central to their teaching work.

The project builds on and adapts a small-scale Fellowship programme run last year through the Carnegie grant. The ETI Fellowships are complemented with more Carnegie-funded participants.

The following specific outputs were anticipated from the Fellowship Programme in the Part B Submission:

1) Intensive training of 8 e-Learning Fellows each year, in the effective deployment of education technology, for a period of 3 years
2) Development of 24 courses to be mounted on Moodle.
3) Papers and conference presentations resulting from in depth research and analysis of how education technology has impacted positively on current barriers to effective teaching and learning at UniJos.
4) Web visibility of the content of 24 courses designed by e-Learning Fellows each year for 3 years.

5) At the end of each year, students will be taught eight additional courses using technology. The actual number of students per course will be determined by the fellow's discipline and the level the course is taught.
6) One evaluation report each year for three years. The 1st and 2nd reports will be after the end of the fellowship each year and the third at the end of the project.

The first batch of e-Fellows were expected to commence their training in April 2010.

The selection process took longer than planned, partly because the ETI chose to stay in step with the Carnegie selection which moved slowly. But the team believes the first group are progressing well. A few of the Fellows found it very demanding at first (there is no easing of their normal work), but have caught up. They are said to be a cohesive self-motivating group. Self-reflection is built into the process. Incentives are provided – e.g. sponsorship for e-Learning Africa for exceptional work.

Many lessons from last year's Carnegie batch have been built into the design of the new Fellowship programme. It is much more education-led and less driven by the attainment ICT-competencies. This makes it less easy to assess and certificate, but Jerome the project leader is working on this.

The team have hand-picked a group of resource persons to support the Fellows. This met with opposition from people in established positions.

The second batch of Fellows is expected to begin on schedule in April and the third in September. The overlap will put pressure on the resource persons.

The Fellows have been told that they are being researched. This seems to have galvanized them to achieve more.

In general, the project seems to be very well designed and managed. It may turn out to offer a valuable model for others. There are discussions about developing a national programme, facilitated by Jos, with funding from Nigeria's Educational Trust Fund http://www.etf.gov.ng/.

General issues

Networking and collaboration

There have been two substantive collaborations involving Jos. Tito Okumu from Makerere participated in the 2010 Conference on the Application of Information and Communication Technologies to Teaching, Research and Administration (AICTTRA)[19] at Jos in September, presenting a paper on the importance of systematic approaches to the planning of ET. The Jos team said that he had had a considerable impact and was asked to chair the drafting committee for the conference communiqué. There is a proposal for a return visit to Makerere.

University of Ibadan invited Jos to take part in an awareness raising workshop on multi-media. In the end, none of the Jos coordinating team was able to go, but two colleagues with experience in this area – including Prof Liverpool – were able to participate. There has been some email contact since then.

[19] Sponsored by Obafemi Awolowo University, Nigeria and the Carnegie Corporation

UCM has expressed interest in the e-Fellowship programme.

They had been expecting a move from SAIDE to kick-start exchanges. The website was no help. They were prepared to spend their own funds on interchange. They agreed that there was more to discuss now and looked forward to an initiative in JHB this year.

ETS

Jos had an e-Learning Strategy before the ETI began. It is an expression of Goal 3 of the University's wider Strategic Plan which addresses ICT for teaching, learning, research and admin. The e-Learning Strategy has wider currency than in 2009 and has been passed to Senate for approval, prior to endorsement by the University Council.

However experience over the last 1-2 years has suggested gaps in the Strategy – such as the need for incentives and the definition of workload standards - and changes in emphasis (e.g. inclusion of m-learning). The approval process therefore will be put on ice while it is reviewed. There is also a need to revamp the Strategy Monitoring Committee.

The team said that the ETS had been useful in providing a broad vision – the parameters or "sidewalks". The ETI projects have also helped them to concretize many of the issues.

Research and Evaluation

The Jos team has been taking research and evaluation seriously. Sunday took on the role of research coordinator after the JHB workshop last year. Prior to the workshop, they did not consider research as a priority within the ETI, but the discussion in JHB suggested there would be value in engaging with it. They were expecting more clarification of the way forward and a renewed central initiative with funding. They were bemused that nothing had happened.

They would consider a new research initiative seriously. The need for baseline data keeps coming up. They would also value more experience in rigorous research methodologies.

Meanwhile they have been active on several fronts producing descriptive research, e.g. on the e-Fellowships for the Distance Education special edition, and papers for conferences (e-Learning Africa, NADEOSA, AICTTRA and IRIS). Their papers have been reviewed by Brenda, Monica and Cheryl. In two cases they were spending their own money on conference attendance.

Action research is built into projects, particularly the e-Fellowships. Facilitated group discussion (focus groups) would be a powerful tool in this project.

On-line assessment of pre-existing e-courseware is already operational, thanks partly to Jerome's acquisition of knowledge about this and other course evaluation techniques at CET. The university has bought survey monkey licenses. There are plans to use peer-to-peer, self and end-user evaluation in the projects.

SAIDE support

They liked SAIDE's "non-intrusive" support. Andrew gave some key advice for the e-Fellow selection process. Reaction to Brenda's workshop were "very positive"; and her material is now an institutional reference.

They were somewhat disappointed with the technical workshop. They had wanted them to review the Moodle installation and train them in doing a fresh one. They had also wanted them to install Mahara. There were technical problems getting Moodle working which meant that not much of value was done. There is a need for more help. They are hoping Clarke can do that. Otherwise they will need to revert to SAIDE very soon.

The budgets are rather tight. There are always unexpected expenses, such as for attendance of the e-Fellows at AICTTRA, and the proposed senior management awayday.

Report of Visit to University of Dar Es Salaam 16-18 February 2011

Introduction

The visit to UDSM was the fifth in this interim evaluation round. I was able to read their second six monthly report in advance.

Most of my time was spent with Centre for Virtual Learning staff who occupy proportionately more of the ETI programme space than in any other institution. This is because there are just two projects that both centre on developing Moodle and e-content.

I also had discussions with

- Prof Ikingura, Acting Principal of the newly formed College of ICT (CVL's home)
- Godfrey Justo, Head of Dept of Computer Sciences
- Staff from CS (Project 2) and other departments (Project 1), including three from the Dar Es Salaam College of Education (DUCE) which has recently joined the project.

Progress in general

The two projects are behind the original schedule, but I don't think this is a serious issue. The main difficulty for CVL has been engaging with academic staff to submit their content for processing. This phase is now more or less complete and CVL staff have been able to improve them and upload to Moodle most of the 26 courses targeted for pro-active support.

With the UDSM model of e-content development – at least through the ETI - CVL are positioned at the centre of the production of course content. There is an iterative dialogue with academic staff, but CVL seems to dictate the pace and control what goes live on Moodle. Other institutions' models are more devolved and give academic staff more responsibility. This distinction has implications for the way capacity building is done (see below). It may also have implications for ownership.

The big development at UDSM in the last 6 months is a more than doubling of the courses – from 12 to 26 - selected for pro-active support by CV in the two projects. I'll look at this more closely below.

Management and governance

There are two levels of ETI governance and management at UDSM. Governance is by the Programme Coordinating Committee (PCC), chaired by the acting Principal of the College of ICT (formerly Dean of SICT) with members from stakeholder units like the School of Education. It meets quarterly and deals with strategic issues. In particular:

- It decided at its first meeting that the projects were not ambitious enough and they should increase the number of courses to be given pro-active e-content support.
- It agreed that CVL should look for 25 new courses to be adapted for Moodle when the number of courses previously on Blackboard and susceptible to migration turned out to be only about 75. This led to the entry into Project 1 of two teacher education colleges - DUCE and MUCE (Mkwawa University C of E).
- It brought forward the closure of Blackboard.

- It decided that the overdue curriculum review of CS should be conducted, with support from ETI.

At the management level, Dr Twaakyondo liaises with the PCC, reports to SAIDE and coordinates the two projects teams. The teams meet together weekly. This frequency seemed excessive to me, until I realized that most team members work within a few hundred yards of each other, and those in CVL usually see each other every day. The projects operate in a dynamic environment - there is plenty to review and make decisions about.

My impression is that both the management and governance levels take their responsibilities seriously. There is some informal communication between them – largely between Prof Ikingura and Dr Twaakyondo - in addition to the formal reporting. As Prof Ikingura is increasingly involved in the implementation of the new College of ICT model, and as he expects to stand down from his position before the end of the ETI, care should be taken to ensure effective communication with the PCC between meetings.

Other organizational issues

ICT infrastructure in most of UDSM is relatively good and improving as broadband gets faster and cheaper with the take up of Seacom. DUCE however has very few computers for student use. Power is not a big problem on the campus as the university is exempt from the rationing that increasingly afflicts other Dar users.

The demand side (from students and academic staff) continues to gain ground. One reason for resistance by a minority is a reluctance to open up their teaching materials to other users by putting them on line.

Senior management is reported be engaged with developments in ET. The DVC admin for example was involved ion decisions about the Blackboard-Moodle transition.

There have been no significant procurement issues mainly because no equipment has been purchased in the ETI. Long and difficult procurement processes would have to be followed if the project teams needed to seek university funds for more capacity building (see below).

SICT has merged with computer systems engineering to form a College of ICT. CVL is a constituent part. There is a longstanding proposal to make CVL a separate unit, reporting direct to the DVC Academic; but it is unlikely to be implemented within the lifetime of the ETI, as CVL is not up to full strength. (This raises the issue of where an ET support unit should best be located. There are several different models in the ETI institutions.)

There are some parallel externally-funded interventions that have a bearing on the ETI.

- There is a World Bank-funded project to build ET capacity in some other academic domains. There is a proposal to recruit a technical consultant for the lifetime of the project as well as train people in e-content. This has obvious synergies with the ETI which they are planning to exploit. Already, they used WB funds to customize Moodle.

- There is a Finnish ICT programme with four components including short-term staff exchange (4 members of the ETI teams have already been to Finland); and an incubator project to help young computer science graduates develop practical skills while they hunt for jobs. The ETI has used some of these students for e-content production.
- The Indian government is subsidizing some on-line courses in business subjects that are housed at UDSM. They have live tutorials from India by satellite and there own LMS. There are no obvious synergies with the ETI, but these courses provide glimpses of what is possible with adequate funding.

There is a mixed legacy from earlier interventions, from Carnegie for example. But the CVL team say they have learned from these experiences. Developing institutional competence in ET is often a long-term, incremental process, with inevitable slip-ups.

Project 1
Migration from Blackboard to Moodle and limited course improvement to strengthen virtual learning at UDSM

The project's aim is reflected in the title.

The Part B Submission referred to the following planned outputs:

1. An initial audit report on existing courses on Blackboard. This report will list existing courses in three categories: those to be migrated immediately to Moodle, those to be improved before being migrated to Moodle, and those that will not be migrated nor improved.
2. Guidelines for staff on e-learning design.
3. Guidelines for staff on using Moodle.
4. Guidelines for students on using Moodle.
5. Approx 200 courses migrated to Moodle. (Until the audit has been completed, it is difficult to predict exactly how many courses will be migrated.)
6. Five courses improved before migration to Moodle.
7. Forty staff trained on the use of Moodle.
8. Five hundred students trained on the use of Moodle.
9. A report on the development and migration process to highlight lessons learned.
10. A set of lessons learned to contribute to the development of institutional policy on educational technology for teaching and learning.
11. A conference paper
12. A final project report

Three major developments took place in the first months of the project.

- First, a decision was taken by the PCC to expand the number of courses for pro-active improvement from 5 to 12.
- Second, it became apparent that the number of courses that were fit to for migration was only about 75. They decided to raise this number to 100 by identifying another 25 courses that had never been on Blackboard but whose lecturers were willing to adapt them for Moodle. Among these new entrants to the project are staff from DUCE and MUCE.
- Third, senior management decided to close down Blackboard earlier than planned for legal reasons and also to block any more use of KEWL.

These three developments put a lot of pressure on CVL human, physical and financial resources, and also increased the scale of capacity building need for the project. This led to slower progress than planned. Considering this, however, UDSM have achieved a lot in volume terms. Most of the 14 pro-actively improved courses are ready to go live.

I accessed a sample of these courses and was able to see that the originators were applying a number of key design principles. I also accessed four courses migrated without pro-active support. Quality was mixed, but there was one example of a live chat having been used, and some structured learning material, rather than just uploaded background sources. Lecturers who are not being helped pro-actively are still given basic training in how to use Moodle. They can also access Brenda's model courseware.

In terms of quality, CVL agree that there is still some way to go. They see this as an incremental process: learning to walk before they try to run, meanwhile getting feedback on what is working well and what needs to improve and be enhanced. They do not have a clear idea of how quality will be assessed. This needs to be thought through, and help may be needed.

Students have been given hands-on training in use of Moodle, but for some large classes (one at DUCE has over 1000) this was impossible. Instead they were given an instructional leaflet and the opportunity to interact virtually with CVL staff – an inventive solution that CVL and the lecturer involved are happy with.

CVL are marketing minded. For example they are producing an e-learning newsletter with ETI funds not needed for Moodle customisation. The first edition was nearly complete when I visited.

Project 2
Creating interactive course materials for independent learning in selected Computer Science courses at UDSM

This project's original aim was, firstly, to identify interactive materials that can be used or adapted for use by seven staff members in the Department of Computer Science. Secondly, to create interactive course materials for use in two Computer Studies courses at UDSM. Where possible, multimedia elements will be included.

The following outputs were anticipated in the Part B Submission:

1. Seven interactive course materials identified and uploaded for use by staff and students
2. Two new interactive course materials of between 5 – 15 minutes each
3. A guide for staff on the identification, adaptation and use of interactive course materials
4. A guide for staff on the creation and use of interactive course materials
5. Seven staff members from Computer Science trained in the identification, adaptation and use of interactive course materials
6. Two staff members from Computer Science trained in the development of interactive course materials
7. A report on the project drawing on the M and E and R activities to distill lessons learned
8. A conference paper

9. A final project report

Project 2 has been affected by two decisions made after it started. One was to increase the number of courses to be enhanced from 7 to 14, with a target of 5(?) lecturers instead of 2 being trained to create multi-media elements.

The second was to partially use the ETI resources to conduct a first full review of the CS curriculum since 2004. This began in September 2010 and will be launched in September 2011.

This delayed progress on Project 2 for a while, but the 14 courses for enhancement were selected early, on the basis that they were unlikely to be substantially affected by the Review. Minor adjustments may be needed once the Review is complete.

Capacity issues for both projects

UDSM's biggest challenge is capacity. Most capacity issues affect both projects, although multi-media creation mainly affects P2.

Basic training for staff and students in using Moodle is not a problem. It is a production line that is well within CVL's competence and seems to be progressing well enough.

With advanced instructional design (ID) CVL have two fully qualified staff; and for multi-media creation, two staff who between them have the necessary skills for most applications. In the case of multi-media, this has been supplemented ad hoc with help from Finnish incubator project students (a temporary expedient)

For devolved work among academic staff, a template and the two guides have been completed (their review by SAIDE-CET team was appreciated), and two CVL staff provide a helpline during working hours (and are even approached in the evenings).

This capacity is not enough for the increased scale of the projects and for post-ETI expansion.

CVL said that Brenda's workshop made a good start in addressing ID issues, and her model courseware is a useful tool. There seems to have been a mismatch in expectations however. CVL, with their centralised model of e-content creation in mind, want intensive training in ID for more of their own staff members. The prevailing view in CVL seems to be that good instructional designers come from ICT stables and develop ID skills afterwards.

Brenda asked for a balance of academic and technical staff. In the end, few academic staff attended consistently. I was told this was partly due to exam duties and also a parallel workshop in basic Moodle.

CVL have people abroad doing PhD or Masters training in ET through the World Bank project. Given this, it seems that short workshops like Brenda's should be aimed substantially at academic staff. UDSM is planning to invite Brenda back. It is very important that both sides are clear about the purpose of the visit. It would also be good to run the event off campus if that is affordable.

Nicholas Kimolo's workshop in multi-media is said to have only scratched the surface. It included a broad range of abilities and Kimolo felt obliged to deliver a somewhat more basic and theoretical course than some CVL staff would have preferred. More intensive and application-specific training is needed. CVL is looking for ways of doing this with World Bank funding, but the approvals process for this is very slow.

The development of e-content is a joint venture between academic and technical staff. It seems to work best when they work as a close partnership. Dr Kapisi from CS described a partnership approach that seemed to have worked well in his case. But there are indications that this was not typical and that the dialogue has not always been very fluid. This may have something to do with ownership issues. CVL were due to have a workshop the day after I left (Saturday 19 April) with academic staff to present work completed. This may have been a trigger for a closer relationship.

Networking and collaboration

There has been no collaboration between UDSM and other ETI institutions. They are somewhat disappointed. They registered on the UCT-based LMS forum but neither found nor initiated any conversations of significance. There were face-to-face conversations with others at the last eLearning Africa, but they didn't come to anything.

ETS

UDSM developed an E-Learning Policy with Carnegie support. It has been in draft for about 4 years, with the adoption process stalled by internal disagreements. CVL inherited the draft Policy when the unit was formed. They say that the Policy will now be reviewed in the light of the ETI and using the ETS as a guide. They are thinking of bringing a consultant to UDSM to help them with this.

Research and evaluation

There has been no movement at UDSM on an overarching research project. They never envisaged themselves playing an active role in research within the ETI.

UDSM's approach to evaluating the ETI is currently to commission periodic evaluations by teams external to the programme. There will now be two instead of three, as the first external evaluation team failed to deliver a report. The first of the two reports is in draft. I expect to receive it shortly and will review it

There is a risk in relying on external evaluation. It can take the edge off the need to put M&E processes in place at the beginning of the project (although in UDSM's case student feedback forms are being deployed on some courses). It can also weaken ownership of the evaluation results. I recommend that the ETI team at UDSM take full ownership of M&E processes and only use external people as facilitators, if at all.

Post ETI

UDSM are very keen to seek funding for expansion of the activity supported under the ETI. I suggested that in a few months, they should revisit their ETS, look strategically at needs, capacity now and in the pip

Report of Visit to Kenyatta University 21-24 February 2011

Introduction

The visit to KU was the sixth in this interim evaluation round. I was able to read their second six monthly summary report and the latest project reports in advance. This was very helpful.

I had separate meeting with each of the 6 project teams.
I also had meetings with

- Members of the ETI Monitoring and Evaluation Committee
- Dr Speranza Ndege, Director of the Institute of Open, Distance and eLearning (ODeL) - the ETI coordinator
- Patrick Kirimi, Deputy Director of ODeL
- The VC and the three Deputy VCs.

Progress in general

There are six ETI projects at KU. Up to now they have operated independently of each other. They vary in scope, more than at any other ET institution. Two of the smaller projects – 5 and 6 – have almost concluded; while project 3 – the online EMBA – is at an early stage in the development process. Most of the projects started late because of delays in local access to funds. Project 1 was delayed further because of the procurement pipeline. Projects 3 and 4 encountered internal project management issues which further delayed progress in the early months.

All the projects now appear to have satisfactory momentum. The three smaller projects – 1, 5 and 6 – are unlikely to encounter any serious hurdles before they finish. Project 2 – the Postgraduate Research Methods Course – is already a high performing project and is on course to achieve or even exceed its objectives. Projects 3 and 4 – both of them ambitious - have made substantial progress, but have still complex territory to navigate.

The KU projects, if they achieve the expected results, should in themselves, make a significant impact on several areas of university life. They should also produce champions for further strides in blended learning, which hitherto has not made substantial inroads at KU.

Management and governance

More than at any other institution, the KU projects have up to now operated independently of each other. The first time the project leaders met as a group, since the February 2010 JHB workshop, was during my visit this month when they made presentations to the KU Management Board. There have been a small number of informal contacts between project members.

They appear also to be relatively autonomous of the ETI coordinator, who relies for her information mainly on informal contacts with the project leaders. For example she said she had not aware for several months of the extent of the delay in the start of Project 2.

Project coordinating teams operate in different ways. Some, such as Project 2, have had periods of intensive interaction. Others – such as Project 1 - tend to meet much less frequently, which may be appropriate when things are going smoothly at the operational level.

ETI governance is through a Monitoring and Evaluation Committee, chaired by the VC. They have met 3-4 times since the ETI began – principally in response to problems that surface. They are informed of progress by the Coordinator and do not receive regular written reports.

This amounts to a much looser and more reactive management and governance system than at any of the other institution. It is does not imply a lack of commitment or interest. We know for example that the VC has a strong interest in the ETI and is even a member of one of the project teams (Project 2). But there are risks in a hands-off approach like this. It relies on the project teams raising issues with the Coordinator; and on her making judgments about what is serious enough to elevate to the governance level. These are difficult decisions to make when people are very busy. The project teams may lack a perspective on what is serious because they don't compare notes with other projects.

It would be sensible for the representatives of the projects to meet more regularly, along with the Coordinator. This should help the teams to chart the final stage of the projects and to anticipate problems. It should also help wider reflection will be valuable for the future. In turn, the M&E Committee may find it useful to have a regular short report of progress and issues arising, either face to face with project leaders or in writing.

Capacity

For most of the project leaders and team members, the ETI was their first experience of internet-based educational technology (ET). Many had difficulties at the beginning not just with technical aspects of instructional design and use if the Moodle platform, but also with fundamental concepts. For many, Brenda's workshops in September were the first opportunity that Projects 2 and 4 had to develop a full and detailed understanding of the potential and challenges of ET. For Project 3 that opportunity did not come until December.

This was a contributing factor in the slow start made by at least two of the projects. Yet ODeL runs what appear to me to be very good 10 hour courses in "eLearning and Pedagogy" and "Instructional System Design". The projects – particularly 2, 3 and 4 - would have benefited from a course along these lines at the beginning. All the projects would have benefited from support from ODeL staff from the outset; but it appears that ODeL staff had little awareness of the ETI. The Deputy Director told me that even now he has had no significant contact with the programme.

The main reason for this "stand-off" seems to be the widespread assumption among academic staff that ODeL is a service purely for distance education. That is certainly its priority at KU. An ODeL "Rebranding" review took place early in 2010, with a report issuing in August. The recommendations reinforce the distance learning focus, including the objectives of putting all distance courses on-line and training all staff involved in delivering them.

Staff who deliver distance learning at KU are also responsible for face-to-face courses, so this will eventually benefit blended learning too. However at present there is a disconnect. ODeL staff support is critical for blended learning. Fortunately a productive support relationship appears now to be in place for the ETI at least.

There are other externally funded interventions in ET at KU. They also seem to operate independently of the ETI, of each other and of ODeL. There are probably potential synergies here too. The best place to address this is in discussions around an ET strategy (see below).

Good pedagogical design is at the heart of e-learning. ET project members need this competence. Members of the three ETI e-learning projects said that involvement in the ETI has made them aware of this link and the deficits in their capacity. One of the ODeL courses addresses this. Training in pedagogy is also available on the campus. Take up of this training among KU staff is said to be low as they are not compulsory and there are no incentives to take them. There have been discussions about changing this.

In common with other ETI institutions, some project members at KU lack project management experience. This was probably a contributing factor in the slow start of some projects. People were said to have had difficulties for example in knowing how to engage consultants and write reports. One informant suggested that a common induction in project management would have been useful.

Formal training can make a difference in these areas. So can mentoring and coaching – formal and informal. More contact between the projects would identify people with particular skills and experience who might we willing to help others.

ETS

ODeL has an e-learning policy which it revises regularly. It is internal to the Institute and relates mainly to distance education. The ODeL Rebranding review dealt with strategic issues, and the recommendations were addressed at senior management level. Again, the focus was on distance learning.

KU has no organisation-wide policy on, for example, the use of a particular LMS, the pace of adoption of blended learning, or training in ET for staff or students.

The ETS has not been instrumental in decision-making. The ETS or something similar would be a good space for developing an integrated approach to ET for teaching and learning.

Other cross-cutting issues

The VC's support for the ETI is undiminished. The VC is said to be concerned to ensure there is quality assurance in all KU products and services. This should be helpful in ensuring the ETI projects deliver quality outputs. Each one needs to develop appropriate quality assurance processes.

The three DVC's have had no direct involvement in the ETI. The presentations by the project teams during my visits were their first glimpses. However, several Deans are either leading projects or have a close eye on them.

The KU main campus, at least, is comparatively well endowed with ICT. Students and staff are being helped to buy laptops. The picture is different for many distance students, but some of the projects are taking steps to include them.

ET, if it is to progress beyond the incubator stage, needs to be demand-led. Student demand at KU is growing, with expectations raised by the availability of ICT. Staff inhibitions are said to be disappearing as more get "infected" by the ET bug. This is supported by the ODeL effort to capacitate the staff with distance education responsibilities. But getting buy-in is still important. Project 2 realised this and made it a priority at the start.

The procurement pipeline can be slow at KU. The university is developing rapidly and procurement requests join a queue. This hampered Project 1, which was reliant on hardware, until the M&E Committee became aware of the delay and got the DVC Finance to devolve the quote capturing process to the project team. There do not appear to be any more procurement hurdles in the lifetime of the ETI.

There has been no collaboration between KU and other ETI institutions.

Research and evaluation

There has been no movement or interest at KU towards an overarching research project.

Evaluation does not feature strongly in the project plans (only P 2 and P4 mention it) and there appears to be no current plan to evaluate the ETI as a whole at KU. It will be important for KU to focus on this as the forthcoming JHB workshop.

The projects

Project 1: Digitization of Past Examination Papers

The project aims to:
1) Increase access to past examination papers to the library clientele via online access;
2) Encourage students to familiarize themselves with and use the institutional Learning Management System (LMS) and associated software, as they will need to use these to access the papers.;
3) Enhance conservation and preservation of past examination papers, hence protecting the papers by reducing frequent handling during reference use or physical copying.
4) Promote and increase usage of past examination papers by the University community;
5) Reduce pressures on the limited shelf space;
6) Address current challenges of staff shortages, theft, defacing and mutilation of the materials.
7) Enhance the image of the library; and
8) Increase efficiency and effectiveness of the service delivery process.

The following outputs were originally defined for this project:
1) A comprehensive database of past examination papers available in the university.
2) A fully functional past examination papers web portal, integrated into the institutional LMS.

3) 25,000 past examination papers digitized by 2011, with metadata generated for adequate description and maintenance of the papers (including the paper number, paper title, school, year, programme, and course).
4) 10 library staff trained and equipped with relevant ICT skills.

Project 1 had some early challenges which delayed the start of the main production line for several months. The delay in access to funds and the KU procurement process were two of them. Identification of suitable software was a third. Some exam papers had to be sourced from departments, and this process was often difficult. Prior sensitisation of academic staff might have helped.

But the project has gathered momentum and is said to be running smoothly. The team meet fortnightly. A training workshop for project assistants was held in December with a facilitator funded by UNESCO. 4000 papers have now been uploaded and edited. The VC decided during my visit that they should go live immediately rather than wait for all 15000 to be completed.

The next exams are at the end of March and demand for the papers is likely to be high. The project team agreed this would be a good time to monitor the process with on-line feedback forms, qualitative (ethnographic) feedback from library staff supervising the process, and possibly some pro-active, systematic sampling of users. These data should then be reviewed to see if any improvements - e.g. in the search fields - need to be made for the future.

Senior management has decided that a QA process – owned by departments - needs to be put in place for the exams papers being uploaded. There is reputation risk in opening access to sub-standard exam papers.

Project 2: Postgraduate Research Methods Course

The project aims to create a common e-course to address inconsistencies, gaps, and inefficiencies in the current provision of research methods education for postgraduates, and to allow them to access the course while they are preparing their research proposals.

The following outputs were originally defined for this project:
1) A 35 hour e-Course in Research Methodology, which will include quantitative and qualitative research methods, research statistics for data entry and analysis and related resources to enhance the quality of postgraduate programmes at Kenyatta University. The e-course will harness available Open Educational Resources (OER) and then be released under an appropriate Creative Commons licence to facilitate re-use across and beyond the institution.
2) Deployment of e-Course into at least 50% of all postgraduate programmes.
3) A research report and article (published in an appropriate peer-reviewed journal) that documents the process and outputs and demonstrates efficacy of e-Learning applications to Research Methods instruction.

The project team say they are very pleased with progress. The project started early and has moved systematically forward. The approach has been devolved – with work on the curriculum and content development for e-delivery being done by groups appointed by special school committees. The committees themselves were appointed by Deans. This system was powered by a consultative sensitisation process that took time but clearly got the necessary buy-in.

The content development stage was said to have be challenging. Only Dr Wainaina had had prior e-content development experience. The process was helped by Brenda's workshop, but this had to be reduced in duration by 50% on grounds of costs and logistics. Brenda's template was used and adapted.

The curriculum and materials have been QA'ed through peer review. The project team will take a final look at it before uploading. They then need to train the lecturers in delivering e-content. They expect to be able to use ODeL staff to do this.

The curriculum has been approved by the Graduate School Board and they have recommended that the course is compulsory. It is waiting to be seen by the Senate Executive Committee.

The course will be piloted in two schools – Humanities and Social Sciences, and Pure and Applied Sciences - in September and reviewed. Both F2F and distance students will be involved and the two groups' experiences will be compared.

Meanwhile, the project conducted a survey on use of ICT among PG students and their academic staff. They received SAIDE advice with the design - with which they were very pleased- and have also obtained help from a JKUAT statistician with e-learning experience. The response rates have been disappointing, but they are following up. The data has not yet been analysed. If the responses are judged to be reliable enough, they will inform the way the pilot is delivered – e.g. possible training for students in using Moodle, and hard copies of the course materials as a fall-back.

The Project 2 team seem to enjoy the project and to work very well together.

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

The main objectives of the EMBA programme were originally to:

- Provide an opportunity to senior managers to acquire managerial and leadership skills aimed at assisting them meet the challenges posed by the contemporary organizational environment;
- Provide a curriculum that combines both theory and practice;
- Provide a flexible learning mode that combines face-to-face and e-learning approaches;
- Increase access to education and training to managers in Kenya and beyond;
- Enhance university-industry linkages by offering a market driven curriculum.

The following outputs were originally defined:

1) A market driven EMBA curriculum.
2) Capacity built in Business School on development and delivery of course content and materials
3) Course modules, with accompanying course content (including CDROMs, local Case Studies, Podcasts, and available OER, as appropriate), developed in alignment with one-year EMBA curriculum.
4) An implementation and marketing plan for the EMBA (including business model and fee structure).
5) Online EMBA successfully launched with 25 students enrolled.

The Online EMBA is an ambitious project. It will create an educational product which is totally new in the region and is therefore untested. The project therefore has had to involve a great deal of thinking about the product and the market as well as well as the content, form and mode of delivery. This has rightly taken time.

The project was also very slow to get started. There were a number of reasons for this. For example there were serious availability issues. The project leader, Prof Chege is Dean of the School of Business, and he and some of his colleagues had two somewhat unexpected major assignments on their hands at the time the project was due to kick off: course development for the new City campus and the creation of a PhD programme in the School.

The innovativeness of the task must also have been daunting, and without solid periods of time to devote to it, the team may have been deterred from diving in.

The project got under way in September. A market survey and stakeholder workshop were conducted in November and December. After a fallow period in January and February, which is a very busy time at KU, the team has now begun to work on the first modules.

They said that they found creation of the online materials the most difficult aspect of the project – more challenging than they thought. Brenda's workshop in December was very helpful. It made them realize how different online materials are from those delivered F2F. The workshop also led to an alliance with ODeL staff who are now offering good support. If this is not sufficient, the project team plan to seek funds to get outside help.

They intend to invite Brenda back at some stage to review what they have done. They also intend to introduce a peer review QA process. In common with other e-content projects, they will have to find reviewers who understand e-learning.

There is palpable commitment and enthusiasm in the team; but they also take time to regularly review the objectives and means of achieving them, which is absolutely right with a project that is breaking new ground.

The thinking at present is to base the online course more than originally intended on the existing face to face MBA and EMBA courses (the latter is delivered at the City campus). This makes sense from a practical point of view. At first the modules will be introduced to campus students alongside the F2F delivery. Monitoring this will be very important. The team expect to be able to launch the online-only course in January 2012, at first probably in Nairobi which will make support easier.

There are only 3-4 staff working on materials at the moment. They plan to expand the number when they feel they are on top of the task and competent to coach others. In contrast to the Research Methods course, the team has adopted a highly centralized, controlled, process.

Possibilities for the next phase include more contact with the other two e-learning projects and with Athabasca University in Canada which has an online EMBA.

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

This project aims to produce e-learning modules in Communication Skills and Chemistry, with a strong emphasis on animation.

The following outputs were originally defined for the project:

1) Digitization of selected Chemistry and Communication Skills Modules for four core courses in first year for Chemistry and one module for the Communication Skills course.
2) Five modules in digitized format, available both via CD and on the institutional LMS. To facilitate cost-effective development, OER will be harnessed to the greatest extent possible and where content can be sourced that aligns with curriculum needs.
3) 19 members of teaching staff and 5 Trainers-of-Trainers trained in module writing for digitized content and generation of digitized materials.
4) Evaluation report on use of digitized learning materials and strategic plan to scale up development of e-learning materials for Open Learning modules.

Project 4 has a coordinating committee and separate groups working on the subject modules. The committee had its first meeting in May 2010.

A curriculum review (the so-called ”baseline study”) was conducted and course modules are being adapted for online delivery. The team recognised that they lacked instructional design skills as well as the ability to create animation. Brenda’s workshop helped them move forwards, although with less than two days (time was spent at the beginning on ICT and organisational issues), its scope was restricted. They organised an internal workshop in November, with help from ODeL staff who are now engaged with the project.

Slow progress last year was partly attributed to a change of project leadership triggered by the departure from KU of Prof Muthakia.

The attention is currently mainly on animation. The initial search for appropriate OERs with animation has drawn a blank. However they have yet to cross into territory which involves registering on institutional sites. Their understanding is that OERs with animation are only accessible through URLs and that is a handicap for some distance students. This was team members’ first venture into OERs.

The solution for animation they are exploring at the moment is to commission a local company to develop objects. They have prepared a proposal for additional funds which is currently with Dr Ndege.

The company they would like to work with presented some mock-up material during the session I had with the team. They are clearly competent at producing material; but the VC decided that the company should train KU staff to produce their own animation at the same time. Unfortunately the company would be unable to do this as things stand.

The animation strategy needs to be discussed further. In the long run, it would be sensible to embed the necessary capacity in ODeL, but that is unlikely to happen in time to pilot the project’s courses in December – their current deadline.

The project team are thinking about peer reviewing and evaluation, but don’t yet have concrete plans.

Project 5: Executive Information System Specification

Project 5 has been commissioned to take the first steps in the development of an Executive Information System (EIS) that will harness data from various systems currently installed in the university and present data "at the touch of the button! in a form that is meaningful for decision-making by management.

The following outputs were defined for the project:

- Conclusion of baseline survey to:
  - Establish management information needs of different levels of management for decision-making;
  - Identify existing infrastructure and infrastructural requirements for the EIS;
  - Determine information gaps;
  - Define infrastructural gaps.
- Detailed functional specification for the EIS.
- Request for Proposals (RFP) for construction of EIS by private service providers, in order to determine required investment to construct the system.

Project 5 is running about 6 months behind schedule, if March 2010 is taken as the notional ETI Part B start. This does not matter from an ETI management perspective as project activities are likely to be completed well before the ETI winds up.

Two of the three main activities – the survey of university managers and the functional specification – have been completed. The next stage is Management Board approval for the specification before the RFP is drawn up (the final stage of ETI's involvement). Before submitting it to the MB, the project team has been advised to draw up estimates for the cost of the system as specified. This will be challenging. Among other things, it will be important to indicate whether the estimate includes internal costs such as implementation project management and training.

Taken together, the costs will be considerable. It will be important to emphasise that the system will not only produce efficiencies but, more importantly, should improve the quality of decisions.

The survey produced a poor response – only 11% - despite follow-up. Some categories of management failed to respond at all. If a supplier is contracted, it will be important for them and the internal project management to engage with a representative sample of all categories of the affected managers to ensure that the survey picture is accurate and up-to-date.

The project team acknowledge that it would have been better to sensitise managers to the project – getting the visible backing of senior management - before launching the survey. Whoever inherits the project from the ETI team will need to have an advocacy strategy if people are to appreciate the potential benefits.

Project 6: Digitization of Theses and Dissertations

The project takes the first steps towards providing online access to all completed Masters and PhD theses, through a pilot digitisation process.

The following outputs were defined for the project:

1) Identification of an appropriate platform to store digitized theses and dissertations;

2) Quantification of the full extent of the entire project.
3) (This step will focus on the quantification of the existing theses) by determining the total number of existing scripts and number of pages of each;
4) Establishment of a policy on copyright implications;
5) Digitization of five (5) theses so as to determine the level of effort needed to digitize past theses;
6) Production of a Phase Two proposal based on the above outputs.

Project 6 is almost complete. It ran about 4 months behind schedule. The final hurdle is the resolution of a copyright issue. If the thesis content database were to be freely accessible beyond the campus, it would be a breach of the author's copyright. The project team is working out a position which they believe will be acceptable. They expect to present this to senior management in April. Meanwhile the database will be made available to the KU community and a separate database of thesis titles and abstracts will be thrown open to all.

The project has produced digital versions of 10 theses. It shared the hardware and software purchased by Project 1. The Greenstone software used so far is not suitable for large volumes of content, so the project propose to switch to a D Space (?) platform.

The project team estimates that at current rates of scanning, it will take two years to complete the backlog. If ETI funding cannot be stretched that far, they will need to increase the rate of scanning by purchasing more equipment and assigning more people to the task.

Report of Visit to Universidade Católica de Moçambique (UCM) 28 February to 4 March 2011

Introduction

The visit to UCM was the seventh and last in this interim evaluation round. I was able to read their second six monthly summary report in advance. It contains insightful reflection on difficulties which I found very useful.

I had meetings with members of the Steering Group (SG) and other representatives of the 5 project teams.
I also had meetings with

- The Rector and Vice Rector
- Hemma Tengler, the director of UCM's inter-disciplinary e-course in HIV/AIDS and Health
- Martin Dwomoh-Tweneboah, Professor of IT at Linfield College, Oregon, on sabbatical at UCM.

Progress in general

There are five ETI projects at UCM. All are behind schedule, but in three cases – Projects 1, 2 and 3[20] - this is partly because the projects have changed in scope. These three are moving forward constructively.

One of the projects – OERs for Health Sciences – is practically moribund. The research project - on e-learning and teaching in higher education institutions in Central and Northern Mozambique – also causes concern because of the weaknesses in the management model.

The ETI projects at UCM need to be seen in the context of an extremely ambitious set of transformational processes which are underway at the university. Some of them – e.g. the ambition for step change improvement in ICT, distance education and quality in general - have been catalysed by the ETI. These processes – and the ETI – face significant challenges but it is impossible not to be impressed by the commitment of the key players. It is important that this commitment is not dented by the inevitable false starts and hiccups that will be encountered.

The other important contextual factor is the elevation of Wisdom Machacha the ETI coordinator, about 9 months ago, to the post of Director CED (Distance Learning Centre), while retaining oversight of the teaching of Information Technology on the Beira campus and contributing to the development of ICT infrastructure. One the one hand, this gives him an unusually strategic perspective on ET's potential and challenges. On the other, he has a huge workload and it is unsurprising if things don't always go to plan.

Management and governance

Led by Wisdom, there is a core group of three, within the SG of seven, which supports each other in managing Projects 1, 2 and 3. The others in this core group are Ngoni Murimba (ICT) and Gerald Henzinger (e-Learning).

[20] ICT Policy, Use and Strategy; e-Learning; and CED Materials Digitisation.

Projects 4 and 5 are managed by other members of the SG and have been less tightly overseen by the SG as a whole.

The projects at UCM are relatively fluid. The original project designs have evolved and in some cases merged with other change proposals. Project planning is a moveable feast. Action research however is beginning to take hold and bear fruit.

Governance is with the Rectorate and operates through the regular informal briefings which are characteristic of UCM.

Capacity

At the start of ETI Part B, UCM had experience of designing and running 2 courses in either blended of fully on-line mode: a Masters in Geographical Information Systems and an inter-disciplinary course in HIV/AIDS and Health. Other courses were being delivered entirely face to face although there were local versions of LMS in a few locations with some static uploaded for remote access. Their burgeoning Distance Education courses were being delivered entirely through paper.

UCM had made e-learning a high priority. The Rectorate insisted early last year that every Faculty should have at least one course online by December. This stumbled on the lack of capability and the difficulties posed by extremely dispersed operations. It has also to some extent suffered from the diversion of Wisdom Machacha to another high priority which is root and branch improvement in UCM's burgeoning distance education operations. Gerald Henziger, the largely self-taught ET resource has also been immersed in improving the distance education operations. Gerald has enrolled on the CET Masters course, but he will leave UCM in September.

Nevertheless from this quasi standing start, a process is underway, which at first glance looks somewhat haphazard, but in fact had a subtle logic and structure to it. It is based on quick wins with the willing – rapidly developing the capacity of motivated staff who in turn are beginning to help others, both in Beira and elsewhere to get started. The "epicentre" is the Beira delegation of the IT department. There are at least two young "stars" at work here.

Some blended modules in IT went operational in 2010 and are being incrementally improved. I accessed two and they look promising, with multiple elements including on-line group task work (the Object Oriented Analysis and Design module which would make a good demo at the JHB workshop).

There is still a long way to go in replicating the early successes, particularly with the friction of UCM's geography in mind. The low key one to one coaching that is going on will probably need some bigger and more formal training interventions for hand picked staff, at some stage, to give the process a periodic boost. As with the other institutions, progress with animation is slow.

Developing capability in design of distance learning materials has also proved to be a slower process than was envisaged, but this is mainly because UCM keep raising their standards from the very low level at the start of Part B.

ET policy and strategy.

UCM is the only one of the seven ETI institutions that has ET policy and strategy as an explicit project. This will be reported on below. The activity in that project has drawn considerable inspiration from the ETI strategy development process of 2009.

ICT

ICT is still problematic – probably more so than at any of the other institutions. This is said to have deterred staff from getting involved in ET initiatives.

Obstacles include UCM's dispersed geography with a legacy of fragmented ISPs; lack of trained technicians; and the poor, unresponsive service and pernicious pricing policy of TDM State telecoms operator.

There have been some improvements and others are in the pipeline.

- UCM has imposed an ICT levy on students which will create, for the first time, an ICT budget on which the unit will be able to rely and plan ahead.
- Moodle has been available to all sites over the internet since January from a central server.
- There is now fibre optic cable to the towns where UCM has its campuses. Beira is now hooked up and there has been a noticeable improvement in service reliability. They are also installing back-up generators and adequate UPS. At present, UCM is having difficult negotiations over joining up their other facilities over the "last mile" to the cable backbone.
- UCM is planning to open a CISCO academy where amongst other things it will be able to train its own technicians.
- They will have, for part of the year ahead at least, the help of the experienced Prof. Dwomoh-Tweneboah. They are also proposing to engage periodically the services of a consultant based at Mutare in Zimbabwe.

Other cross-cutting themes

The Rectorate's support for the ETI is undiminished. In fact it seems to have broadened their vision of what might be achieved still further. In particular there is now a lot of interest in introducing ET into distance education, beyond the simple digitization of materials for more efficient delivery to the students (the original theme of Project 3).

UCM's relatively small size and informality means that procurement is not an issue.

There has been no significant networking or collaboration with other ETI institutions during Part B.

Research and evaluation

UCM has its own research project (Project 5). Monica has supported this project, delivered a workshop in action research and discussed other research initiatives. There is evidence that action research is being practiced in some areas; Project 5 is moving forward, somewhat fitfully; and Wisdom was keen to develop research capacity through involvement in a CET-led initiative. But nothing came of that or other activity that was discussed with Monica. It is probably not the best time to be doing anything ambitious on that front, bearing in mind all the others.

UCM appear to be keen on M&E at several levels. In addition to the action research, which I include under the M&E umbrella, they have specific ideas for evaluating some of their products and also conduct an overall summative evaluation of the ETI. I discussed these levels. They all need further thought and work. UCM will contribute to the session on M&E at the JHB workshop, particularly on action research and ideas for summative evaluation.

Project 1: ICT Policy Development

The original project aim was to develop an ICT Policy that has the support of all faculties. UCM has been unable to develop an organization-wide ICT approach mainly because of the dispersed and autonomous nature of each faculty.

The following outputs were anticipated.

1) A draft ICT Policy document for distribution and consideration before a stakeholder workshop;
2) A 3-day workshop in Beira for 3 senior representatives from each UCM faculty (18 people);
3) A university-wide adopted ICT Policy document;
4) A set of satellite documents on specific issues.
5) An Acceptable Use Policy (AUP) document; and
6) A revised Education Technology Strategy (ETS) document that outlines the actions required to actualize the direction of the new ICT Policy.
7) A report that outlines the process followed and lessons learnt.

There have been two significant changes in this project from the design that was originally submitted for Part B. The first is that a comprehensive five-year ICT strategy has been developed to give concert expression to the high level statements about ICT infrastructure, equipment and human capacity in the ICT Policy. There is an intention to roll out the strategic plan by means of annual operational plans with short-term milestones, targets and budgets.

The other change is that the project team no longer intend to hold a facilitated stakeholder workshop as a key stage in the development of the two instruments. They are content with soliciting views at individual sites and using the June 2011 Directors meeting as the final stage in the consultation process.

The documents exist in draft. It was beyond the scope of my evaluation visit to subject these documents to detailed scrutiny. They seem to cover the most important parts of the ground. In some cases they go into a great deal of detail – e.g. on email policy. In others they stay at a high level. Some of the strategy objectives could be tightened up in terms of measurability, although it could be argued that this type of detail is best avoided in a five year plan, leaving that to annual operational plans.

My view is that there should be an unambiguous indication in the strategy of where UCM wants to be in five years time in all important dimensions, but that they should be prepared to revise this regularly in the light of experience of what is feasible, and also to embrace new opportunities.

An alternative to a two-tiered plan – 5 year and one year – would be to have a rolling 3 year plan with measurable objectives which are reviewed and if necessary revised every year.

I was told that the decision to cut out the stakeholder workshop was made because a clear consensus has emerged on the main planks of the platform. If there is any uncertainty about this, I would recommend reinstating the workshop. It should not be axed simply to save money or avoid the effort of convening the workshop.

Project 2: UCM e-Learning Project

The project aims to introduce e-learning to UCM through development of course components to be delivered via an LMS, with an initial focus on Masters students.

Stages in project implementation:
1. Selection and Deployment of an LMS
2. Technical Capacity Building
3. Academic Capacity Building
4. Course Design and Content Development
5. Student Capacity Building
6. Course Delivery
7. Monitoring and Evaluation

The following specific outputs were anticipated:
1) Selection and deployment of the approved LMS onto a new Beira server.
2) Technical competencies amongst staff to support and customize an LMS.
3) Academic competencies amongst staff to create and moderate online learning environments.
4) Computer skills competencies amongst the Master's student body.
5) Development of a total of 90 notional hours of content by staff members from within three faculties (Tourism, Informatics and Economics) of Masters courseware, student activities and assessment tasks with support from the technical personnel.

UCM have opted for Moodle and it is now located on a server accessible through the internet.

The development of academic staff competencies has had mixed results. Almost all of the IT department staff in Beira have made good progress - in some cases very good. All are using several communication, learning and assessment tools. Some are paired with colleagues in other units to coach them, an arrangement that appears to be working very well and is developmental for both parties. (It might be worth a quick mention at some point in JHB.) If this model is to become institutionalized it may be necessary to run training in coaching.

MBA course staff proved to be difficult to pin down, so the focus shifted to teachers of undergraduate courses in the economics and management faculty. Responses here have also been mixed. The more committed ones are being paired with IT department colleagues.

It was not possible to talk about the Masters in Regional Development as Sam was away.

The focus has widened to include other willing staff – including IT department staff on other campuses, some staff in the Nursing department, and at their request, a group in the faculty of Communication and Education in Nampula. These two groups

are being tutored by Beira IT staff. This demand-related model appears to be a good one.

The Beira IT department staff work as a team. They collaborated on quality criteria for the learning platform, and peer-review each others work. Wisdom said that Andrew's workshop had been the springboard for them. It had shown them the importance of module planning as a first step; and had given them further insights into learner-centredness (UCM has already mainstreamed problem-based learning, so this should not have been new to anyone).

It was said that Hemma Tengler's online HIV/AIDS course had been an inspiration.

The IT department have started to get systematic feedback from students about their online experience; and they are thinking of evaluating results against a control group from another campus who have not yet had blended learning (this needs to be carefully constructed and interpreted).

The IT staff want to do more with multi media and animation. They may need more training in this.

Project 3: UCM CED Learning Materials Digitisation Project

The project's main aim is to digitise CED learning materials which have up to now been produced in Beira by photocopying and delivered to the other locations by road. Digitisation would not only reduce transport and printing costs but also allow for flexibility in materials review and improvement whenever necessary. The digitisation will run in Beira and the electronic repository for the developed digital material will be stored and administered in Beira.

This project was to focus on the following areas:

- Training for CED coordinators in development and distribution of electronic documents;
- The development of a sample of electronic training materials.
- Training for CED tutors to support the use of digital materials in teaching and learning;
- Training for CED students to access and use digital materials in their learning;
- Evaluation of training and materials developed to ascertain appropriateness and usefulness; and overall evaluation of the project.

The emphasis of this project has shifted from the mechanical process of digitisation to radically improving the quality of the materials from a learning perspective. Moreover, in scratching at materials quality, the team has uncovered a series of other quality issues that lay festering underneath (this is Wisdom's model – the scabies analogy - not mine!). UCM went on to commission SAIDE to do a comprehensive review of the distance education operations.

They are near the end of several iterations of training and review involving Andrew, Ephraim, Sheila Drew, a Portuguese academic. The materials are now in much better shape and almost all have been digitised. The coordinators have a much clearer idea of what quality means. The team want to provide more training for module writers and in using the online materials in tutoring. To reinforce the improvements, Wisdom has produced a proposal for restructuring the CED, providing professional pedagogic support and local supervision of tutors.

The project has also set off thinking about future modes of delivery including radio.

Basically the train that is running in CED is completely different from the one a year ago. The ETI is credited with provoking these changes. The agenda is a very ambitious one, but essential if the UCM is to provide a satisfactory service to the burgeoning numbers of distance students – now around 8000, double the number a year ago.

Project 4: OER for Health Sciences Project

The original objective of the project was to improve the quality of teaching and learning through development of materials making use of Open Education Resources (OER). This would be achieved by incorporating available OERs, adapting them where appropriate, and developing new OER material. The project would run a 'proof of concept' pilot in the Faculty of Health Sciences and later extend to the Faculties of Management of Tourism and Informatics and the Distance Education Unit (CED).

Among other things, the project would seek to:

- Conduct a search for suitable OERs.
- Establish Moodle on the Health Sciences local server.
- Train lecturers in locating, selecting, using, adapting, and developing OERs;
- Conduct research on the interplay between pedagogy, Educational Technologies, and OERs;
- Develop an OER policy that determines direction in terms of the creation, usage, and marketing of OER resources to students, lecturers, and others outside of UCM; and
- Create an OER repository accessible on the UCM intranet and internet.

There has been little or no progress in this project, apart from establishing Moodle. The training took place, but only 9 out of the targeted 25 people attended. Of the 9, only 4 were teaching staff.

No materials have been developed and as things stand none is likely to be. The Health Sciences staff who should take this forward are simply too busy.
The project focus needs to switch to another target or targets as soon as possible. Working with OERs is not as easy as it may seem, so whoever is chosen to work with this project must have adequate time and commitment.

Project 5: Constraints, challenges, and possibilities of adopting e-learning and teaching in a developing country: An exploration of Higher Education institutions in Central and Northern Mozambique.

The project aims to explore the potential for e-learning in these parts of the country both in UCM and the other HEIs with a presence there. Another aim is, in the process, to develop research capacity among UCM staff.

Main research questions originally identified were:

- What are the key situational constraints and possibilities for adopting e-learning? (These could include geographic, socio-economic, political and financial issues)

- What are the key organizational constraints and possibilities for adopting e-learning? (These could include cultural, change management and leadership issues)
- What are the key technical constraints and possibilities for adopting e-learning? (infrastructure – hardware, software, connectivity and bandwidth costs; technical support and maintenance; limited service providers)
- What are the key pedagogic constraints and possibilities for adopting e-learning? (traditional teaching methodologies; lack of modeling)
- What institutions of higher learning are operating in Central and Northern Mozambique?
- What are the courses being offered by these institutions?
- How many students do these institutions enroll per annum and what are their enrolment patterns since 1992?
- Which methods of teaching are being used in these institutions?
- What role can educational technology play in UCM's endeavour to be a cutting edge institution in innovative teaching and learning?

The research is to be carried out through mixed quantitative and qualitative methodologies.

Main project activities:
1. Identify co-researchers
2. Develop research outline/work plan
3. Develop research tools and pilot them
4. Data collection
5. Data analysis
6. Production of draft research report, paper(s) and presentation of results
7. Results publication

This project involves a large scale research exercise. There are said to be about twenty HEIs operating in central and northern Mozambique. If they are all to be covered satisfactorily it will involve careful advocacy to convince them to take part, a sophisticated sampling framework for the questionnaire surveys, and perhaps most challenging of all a major logistical exercise, which needs to be meticulously planned and managed. Analysis and reporting will not be easy.

The research concept has been well thought through, bearing in mind that its focus had to shift at the 11th hour to fit into the ETI concept, so other things being equal, it should not be very difficult to construct the research instruments.

To date progress has been fitful; communication with SAIDE has been poor; and the quality of outputs, such as the literature review, has not impressed. Effective leadership of a project like this is absolutely critical, especially as most other members of the team are inexperienced in research on this scale. There are also too few members of the team as the response to the recruiting exercise was disappointing.

I believe the leadership issue needs to be tackled right away if the project is to succeed. There must be consistent, focused hands-on leadership from now on. If that cannot be guaranteed with the present leadership configuration, a change needs to take place. I met two team members who are well motivated and understand what needs to be done. They and others if possible need to be empowered to move forward. But they need help both from leadership in UCM and from SAIDE.

The most urgent priorities seem to be these:

- The target universities need to be approached sensitively, either directly or through the government.
- The remaining research instruments need to be created and tested.
- If the public HEIs give permission, liaison points need to be identified and briefed.
- Field research staff – for interviewing - need to be identified and briefed,
- A detailed field (logistics) plan needs to be worked out and shared with everyone involved. One person with adequate time needs to have overall responsibility for it.

The possibility of including the public HEIs may recede or disappear either for political or practical reasons. In that event I believe it would still be worth conducting the survey on UCM campuses as a pilot for possible extension to the other institutions at a later date, or simply as a one-off exercise, with staff development in research as its principal objective.
eline, other sources of funding, and then identify areas for funding proposals.