

12-12-2010

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Towards the collaborative design and implementation of an ICT management degree in Uganda

by

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ABSTRACT

The Uganda Martyr's University (UMU), with support from the Vrije Universiteit in Amsterdam (VU) and the University of Pretoria (UP) has initiated a project with one of its aims the development and implementation of a Masters degree in ICT Management at UMU. The project was initiated in 2007 and the first students enrolled in April 2010. VU facilitates the funding for the project whereas the role of the UP in this collaboration is to assist with the development and implementation of the Masters programme in ICT Management, with the focus on capacity building of the UMU staff. Although the project is still in its infancy, differences between assumptions and expectations of UP and UMU stakeholders are becoming apparent. Using the approach of participant observation and Critical System Heuristics as a conceptual framework, the authors critically reflect on the collaboration between UMU and UP. Results from the project initiation phases highlight the need for crafting a collaborative partnership which negotiates different views of quality and quality control and the issue of contextualised knowledge, keeping in mind the importance of an openness to unexpected outcomes and innovation. Results also highlight the importance of a sense of companionship, openness and trust, and ultimately the need to address power relationships in intercultural collaboration in Africa.

Keywords: Masters Degree in ICT management, Critical System Heuristics, capacity building, Uganda Martyr's University

BACKGROUND

During 2007 the Centre for International Cooperation of the Vrije Universiteit in Amsterdam (CIS-VU) approached the School of Information Technology at the University of Pretoria (UP) to be the third party in their collaboration with Uganda Martyr's University (UMU). UMU submitted a project proposal to the Dutch government with the main aim to establish a Centre of Excellence at the Department of Information Technology at UMU. The project has several sub-goals, namely 1) to increase knowledge and promote expertise by developing a Masters Degree in ICT Management 2) to implement the degree at UMU, 3) to establish a Research Centre at UMU and 4) to build capacity of the UMU Information Technology staff members. The Dutch government accepted the proposal and appointed CIS-VU to coordinate and manage the funding of the project.

The role of the University of Pretoria in this collaboration is the development and implementation of the Masters program, which includes capacity building of the UMU staff. The curriculum for the MSc in ICT Management has been decided upon by UMU with some inputs from UP and VU. It was approved by both the UMU Senate and the Uganda National Council for Higher Education (NCHE). The first offering of the degree is currently running from April 2010 to October 2011. The courses cover the topics of ICT management, ICT strategy and Policy Planning, E-Business, Project management, ICT architecture, Security, ICT Development, ICT Financial Management and some research modules.

UP staff members support UMU staff members in the following ways: Designated UMU staff members visit UP for periods of ten days at a time to receive training on the course material and on teaching methods. The UP staff member either develops course material before the visit and it is then taught to the particular UMU lecturer, or the course is developed in a collaborative partnership with the UMU lecturer during the 10 days. After the 10-day course development and training, UMU staff present the course at the UMU facilities over six weekends. A UP staff member is present during the first weekend's contact sessions. After that, support from UP takes place via e-mail and involves giving advice and conducting quality control in a number of ways. From 2011, UP will only participate as advisors and external examiners. The research modules are developed and offered by UMU staff.

RESEARCH INTEREST

The authors, both based at UP, are involved in the project as project coordinator and lecturer respectively. In the process of coordinating the visits from the UMU staff, the visits of UP staff to UMU, the challenges related to quality control and relationships between UMU and UP, we experienced the need to reflect on our relationship with UMU. From the experience gained at this stage, it seems that the implicit assumptions and value judgments held by the different stakeholders in the project potentially lead to conflicting ways of approaching teaching, determining learning content, and conducting quality control. This might work against the long term sustainability of the program.

Collaborative partnerships and sustainability

In ICT for Development (ICT4D) literature, the term sustainability is a multi-faceted concept. Ali and Bailur (2007) extract the essence of the term as support, maintenance, to keep alive or regenerate and to avoid failure. Hemmati (2002) as cited in Ali and Bailur (2007:3) considers sustainable development as “a process of dialogue and ultimately consensus building of all stakeholders as partners who together define the problems, design possible solutions, collaborate to implement them, and monitor and evaluate the outcome.” Ali & Bailur (2007) express their scepticism about the emphasis in ICT4D projects on sustainability: “Nothing has ever been sustainable, and nothing will ever be” (p.12). In their opinion no stakeholder analysis or any other sustainability framework will predict the future. Instead, they ask for an openness towards the concept of *bricolage* and improvisation as Ciborra (1994, 1998) cited in Ali & Bailur (2007) suggests.

Kleine & Unwin (2009:1057) confirm the difficulties of ensuring sustainability in ICT4D projects but still consider “crafting collaborative partnerships” as one way of moving towards the ideal. They give ample examples to illustrate the problematic nature of such partnerships but insist that despite these problems all relevant stakeholders need to be engaged in the delivery of effective ICT4D programmes. They argue that involvement from all stakeholders increases the diversity of expertise available, enables capacity building, provides diversification of funding and facilitates shared understandings.

These findings and views from literature support the goal of this paper which is to reflect on the UP-UMU partnership. A better understanding of the positions taken by the various stakeholders might help crafting a “collaborative partnership” (Kleine & Unwin, 2009) which might support long term sustainability. From recent experience gained by using Critical System Heuristics (CSH), we consider CSH as an appropriate method to guide our reflection (Kriek et al, 2010). CSH was developed by Ulrich as a way of thinking explicitly and critically about what perspectives and goals should guide and/or are guiding our decisions and actions in a planning context (Venable, 2009).

The next section gives a short overview of CSH after which the research strategy is explained. The findings are then discussed after which the concerns are identified. The paper concludes by considering implications for further collaboration between UP and UMU.

CRITICAL SYSTEM HEURISTICS

Background

Critical Systems Heuristics (CSH), the brainchild of Ulrich (Ulrich, 1983), is a philosophical framework to support reflective practice. Based on the work of Churchman and Habermas, it is rooted in critical systems theory which concerns itself with emancipation and the ethics of intervention (Jackson, 2001). CSH supports these objectives by providing a set of questions and argumentation tools that enable reflective practice (Ulrich, 2005).

In the design, planning and implementation of a system (any system), boundary judgements are made by those involved. This refers to decisions, based on claims, being made on which facts and values are considered relevant to the system and which are not. CSH gives a systematic way of handling boundary judgments critically. Ulrich emphasizes the necessity that all involved as well as those not involved but affected by the system, should know that boundary judgements are socially constructed, i.e. each perceives the system from their own frame of reference and therefore their boundary judgements will differ (Carr & Oreszczyn, 2003).

Four basic boundary issues are proposed by Ulrich. They deal with a claim’s 1) basis of motivation, 2) basis of power, 3) basis of knowledge and 4) basis of legitimacy. The first three issues are directed at those involved and the fourth at those affected but not involved. For each boundary issue CSH examines three categories namely 1) stakeholders (those involved or not

involved but affected), 2) the nature of their interest and 3) problems that may arise with regard to the concerns of stakeholders. Each boundary category is translated into descriptive (what is?) and prescriptive (what ought to be?) boundary questions which result in 12 boundary questions with a “what is” and “ought to” part each. The boundary questions are listed in the paragraph on “Findings”. As mentioned by Venable (2009), the questions guide decision makers who embark on improving a situation via systemic interventions to think explicitly and critically about what values and goals should guide their decisions and actions. Making the stakeholders, their concerns and their relevance explicit, forces a critical perspective.

Applications of CSH in literature

CSH can be applied to any purposeful system. A purposeful system refers to any area of concern which is associated with human purpose (Reynolds, 2006). Ulrich summarises the different uses of CSH as 1) determining the “ideal mapping” (using the “ought to be” questions); 2) evaluating the “as is” of the situation; 3) reframing assumptions by asking “what other context might be relevant?” and 4) challenging stakeholders who are not willing to disclose their assumptions or who try to impose them by asking “don’t you claim too much?” (Ulrich, 2005).

Using these four questions, three general areas of application have been recognized in literature. The first area concerns itself with using CSH to investigate, assess or evaluate systems and their designs. As an example, Reynolds (2006) applied CSH, using the first two questions, to evaluate three projects over a period of time. He conducted regular evaluations of the difference between the ideal and the actual situations. The three projects were evaluated on different levels, the first focused on administration, the second on project management and the third on policy design. With this he illustrates that CSH can be restricted to a system of interest.

The second proposed purpose emphasizes the emancipatory value of CSH (by using the fourth question). Ulrich (2005) believes that all involved and affected should be able to use CSH as a practical tool for emancipation: the undeclared boundary judgements should become transparent to all. “In order to achieve such transparency, one need not have as much information and expertise as those who use boundary judgments dogmatically; it is quite good enough to offer an overtly tentative and subjective suggestion or question regarding a boundary issue”. He illustrates this by suggesting questions that might be asked to expose boundary judgments in a selection of case studies.

Thirdly, CSH is used to inform critical professional practice. Carr and Oreszczyn (2003), Flood and Jackson (1991) and Venable (2009) use CSH as a tool to support reflective and critical social practice – the focus here is on the question “what other contexts might be relevant?” Carr and Oreszczyn (2003) use CSH as a structured approach to the inclusion of ethics and values in complex policy decision surrounding the commercialization of GM crops. Flood and Jackson (1991) applied the framework to investigate a police policy strategy with the aim of discovering alternative designs by investigating the current strategy, which in this case represents the system of concern. CSH is used by Venable (2009) to consider the stakeholders and design goals that should be considered as relevant by researchers conducting Design Science Research.

This study belongs to the third category. We use CSH to unveil the assumptions and expectations held by UMU in order to reflect on our role in the partnership.

Although the literature indicates the usefulness of CSH for certain purposes, it is not used uncritically and quite a few concerns and shortcomings of CSH are mentioned. Some of these are discussed in the next section.

Critique against CSH

In their analysis of the proposed purposes of CSH, Flood and Jackson (1991) argue that “*CSH mainly focuses on ‘finding out’ rather than intervention itself*” (Flood & Jackson, 1991). A further challenge relates to the relationship between those that are involved and those that are affected, or as Flood and Jackson state: “*Why should the involved bother to take account of the views and interests of those who are affected but not involved?*” (Flood & Jackson, 1991).

Ulrich (2000) admits that communication is an issue, mainly because of differing reference systems and boundary judgements. He then explains that the involved parties should just be aware and understand the different reference systems for them to really understand each other. A significant critique related to communication relates to the assumption that given the chance, the voiceless will want to or be able to raise valid opinions and challenge those of the experts (Midgley, 1997). They might not be able to or want to voice their opinions, because of for example the political context, lack of comprehension because of the complexity of CSH questions, and so forth. This implies that success with CSH is limited due to a potential lack of fair communication. Ulrich (2000) though, counter argues that even when those involved do not

want to include the suppressed needs of the voiceless, critical competence can still be used to raise the needs publicly or to other sources of authority. The boundary critique of CSH does not totally lose its emancipatory power (Ulrich, 2000).

Another concern is that CSH does not deal well with one person fulfilling multiple social roles or with more than one person fulfilling the same social role. For example, one person may be both the decision maker and client or beneficiary of the project. Because the questions are so directive and distinct in the classification of roles, interviewees find it difficult to give straight answers to these as the roles are blurred and overlap (Kriek et al, 2010). Despite these difficulties CSH remains a useful tool to uncover or expose implicit values and assumptions (Carr & Oreszczyn, 2003).

RESEARCH STRATEGY

Approach

CSH has an emancipatory focus and concerns itself with the ethics of intervention. It therefore lends itself to critical research. This research however has an interpretive view aiming at understanding the boundary judgements of stakeholders as social constructs. The focus of the research at this stage is on understanding the situation and reflecting on the practices. We use the approach of participant observation. Being closely involved in the project, we not only observe events but participate in activities as well (Myers, 2009). As researchers, we are involved as project coordinator and lecturer respectively. The task of the project coordinator is to manage the visits of UMU to UP, getting feedback from UP staff on the training at UP as well as the way in which the course was offered at UMU (including assessments and teaching methods). The project coordinator also reports back to VU on the progress of the project from time to time. The lecturer (co-author) is assisting in the ICT management course, has a background in ICT4D and visited UMU once.

The strength of participant observation is that the researcher is personally immersed in the ongoing social activities of a group for the purposes of research and to achieve a level of understanding (Myers, 2009; De Vos et al., 2007). During participant observation the researcher attempts to be both an emotionally engaged participant and a coolly dispassionate observer of the lives of others (De Vos et al., 2007). Being in this position give the researchers the opportunity to

nurture and develop relationships with UMU stakeholders so as to create an openness and mutual trust for doing in-depth inquiry and interviews. This addresses the critique against CSH's lack of potential fair communication to a certain degree. A participatory approach is also conducive for crafting a collaborative partnership (Kleine & Unwin, 2009). This is illustrated by the way in which both the UMU lecturers/participants and researchers perceived themselves as equal partners or collaborators in the project by the time the interviews were conducted. Interviews took place after about 12 full days of working together and visits to each other's personal spaces. A comment from one participant illustrated this as she responded after the interviews: "we were so happy to have you and for the interview. It made us feel that we have some people working closely with us".

Due to the way the project was initiated, UP staff are considered and framed right from the beginning as the "experts" in the project. This potentially presents a difficulty with regard to perceived power relationships for building collaboration and partnerships from a both a course development and data collection point of view. This perception had to be addressed through participatory approaches before access to the honest opinion and trust could be fully achieved. Therefore, following our approach presented an emancipatory position for critically addressing power relationships in intercultural communication (Asante, 1983; Flyvbjerg, 1998 in McGrath, 2005; Čečez-Kecmanović, 2001; Kvasny & Richardson, 2006), and openness in collaboration.

Participant observation, therefore, addresses what Kleine and Unwin (2009) highlighted as a strategy for sustainability in ICT4D initiatives and the process of dialogue and consensus building of all stakeholders as partners as they define the problems, design solutions, collaborate to implement them in the building of a Masters course at UMU (Hemmati, 2002 cited in Ali & Bailur, 2007).

Data collection

The CSH 12 boundary questions were translated by us and applied to the project. Three of the UMU lecturers were interviewed at UMU. We focused on these three lecturers because at that point they have just visited UP and were available the weekend of the co-author's visit to UMU. One of the UMU lecturers is also the project coordinator from UMU side. They all have a background in Computer Science with one of them currently focusing on ICT4D for her doctoral studies while the other has just completed her Masters degree in management studies. The

interviews were recorded and transcribed with their consent. In addition to these interviews we drew on our observations, informal discussions with other UP lecturers on the project and reports submitted by UP lecturers as data sources to gain more knowledge on the views held by UP lecturers.

Data analysis

We analysed the interviews according to the boundary questions. However, some of the questions and answers overlap and one question was not answered to our satisfaction. This could be due to lack of time or interviewees having difficulty grasping the CSH terminology. The summaries of the interviews deal mainly with the “ought to” scenario since the project is in its infancy. We point out concerns as identified by the researchers.

FINDINGS

Interview results from UMU

Sources of Motivation:

1) Who is (ought to be) the client? Whose interest are (should be) served?

According to the interviewees the following stakeholders should benefit from the project:

- The industry – meetings were held before the project proposal was formulated with the big organizations in Uganda and they indicated that they need professionals that can bridge the gap between managers and the IT department in an organisation. It is too early to say whether they are currently benefiting. The current M students are not all working in ICT management and therefore the student will not be in a position to implement his/her newly acquired skills. It is proposed that industry should be directly targeted in the marketing of the degree to convince them to send their IT management staff to the course.
- Students – they are acquiring new knowledge and skills and should be more marketable. It is too early to say if this is happening.
- UMU – There should be financial benefit for the University by it having a new product. Also, UMU is building a name by providing a first of its kind degree in UMU. If the

<p>degree is successful, UMU will “gain name” in the industry.</p> <p>UMU lecturers - UMU is considered a young university with young lecturers. This project gives them exposure. Recently a quality assurance was done of the IT module at UMU. One of the experts pointed out that UMU should “use this chance with the new ICT course to see how you can evaluate your IT course, to see how a proper study guide is made, different ways of teaching ...” and lecturers feel that this is what happened: “ we got that opportunity to see and to expand our knowledge.” Lecturers also feel that they gained new knowledge, that they benefit financially by teaching a part time degree and that they get good experience by having a chance to go to South Africa.</p>
<p>2) What is (ought to be) the purpose?</p>
<p>Although they have a clear idea of the purpose of the degree, two interviewees indicated that all the lecturers involved in the teaching should have a clear concept of the purpose and the overall curriculum. “Even those that are teaching, most of them don’t know anything about the curriculum – they have not looked at the document approved by NCHE. We need to sit down and look at what was expected, at what was approved.”</p>
<p>3) What is (ought to be) the measure of improvement?</p>
<p>The interviewees agreed that it is difficult to measure improvement at this stage of the project. They feel though that the reaction of industry to this degree will act as a measure of improvement or success. They also consider student performance as a measure as well as students opinions about the degree. They feel that an overall evaluation of the project should be done later in the year as well as after the first delivery of graduates. In general, the interviewees felt very positive about the outcome of the degree: “they (students) will not come out the same as they started. They will be contributing. That is how it is measured.”</p>
<p><i>Sources of Knowledge:</i></p>
<p>1) What expertise is (ought to be) consulted? That is, what counts (should count) as relevant knowledge?</p>
<p>The UMU project coordinator mentioned that they decided at this level to “ignore what we have – maybe we are wrong”. With this he means that even though the curriculum of the degree was</p>

discussed, scrutinized by experts and approved by the NCHE, and even though he considers the content received from UP as relevant he is of opinion that the UMU lecturer may appropriate the content: “it is a lot of knowledge, you are not going to teach everything. ... Whatever they give you is good – but now we are limited”. Another interviewee agreed that it is only once you start teaching that you know which knowledge is relevant to the student – “only feedback from students will give us whether content is relevant as yet, consider that this is a brand new course”.

One interviewee found the provision of frameworks to the students as very relevant. “We have not been succeeding simply because we did not have frameworks.” He believes that following frameworks will ensure successful implementation of ICT projects since the developers of the frameworks “looked at all aspects”.

The matter of contextualizing the knowledge to the Uganda context was thoroughly discussed. One interviewee used the word “higher” to describe the level of knowledge received from UP and that it must be brought to your “own level”. This resulted in a debate on the value assumption reflected in the use of the word. The other interviewees did not agree that local knowledge is at a “lower” level but one interviewee mentioned that “what is obsolete in Europe is not (obsolete) for us”. Another remark made by him was “what we think is future is already happening – we are not on the same level”. Here he referred to an assignment in one of the M courses where students had to imagine ICTs in 10 years’ time. Students mentioned data centres, virtualization and mobile computing but the UP lecturer’s remark on the assignments was that these are already happening.

The lecturer with the ICT4D background emphasized the importance of making students aware of the “reality on the ground” and that “they should be aware of the context of the Uganda environment”. “They should be aware that we can develop technology here but can also use technologies from elsewhere”. Another viewpoint was given by one of the interviewees. He pointed out that contextualization is not always appropriate referring to courses where “you need to look at industry best practices ... at what is happening in other countries. If they do it better than you, you can adopt (it) to your own work situation.”

From these discussions we inferred that the underlying assumptions about ICT and the ICT training project, may differ from person to person and that at UMU lecturers may have different

perspectives based on their background and prior exposure.
2) Who is (ought to be) considered a professional? That is, who is (should be) involved as an expert?
It was made very clear that UP lecturers are considered the experts who have to “transfer knowledge into us so we can become experts.” That is also why the UP lecturers have to teach the first 8 hours of the contact time. This gives UMU lecturers the chance to watch them and learn from them. On the other hand, the interviewees see themselves as experts in contextualizing the given knowledge to their local context. One interviewee particularly appreciated the fact that both VU and the UP lecturer recognized her role as expert on local knowledge to direct students towards contextualizing the content. The project coordinator of VU who assisted in the curriculum development of the degree, emphasized the importance of ownership of the degree.
3) What or who is (ought to be) assumed to be the guarantor of success? That is, where do (should) those involved seek some guarantee that improvement will be achieved.
Although the interviewees do not mention what acts as guarantee for success for this project, they are adamant that there will be “a lot of improvement”. “Somewhere, somehow (students) can apply it”. This may relate to the unexpected outcomes and innovation that Ali and Bailur (2007) emphasise and that one should be open to it.
<i>Sources of Power:</i>
1) Who is (ought to be) the decision-maker? That is, who is (should be) in a position to change the measure of improvement?
All the questions related to this issue were answered by the project coordinator of UMU. According to him the Faculty Board at UMU is the main decision maker. The Faculty Board is made up of all staff members. All decisions pertaining to the Masters degree must first be scrutinized and approved by them. It is the Faculty Dean and Head of Departments that decide on the budget and allocate resources. This confirms his view on ownership.
2) What resources are (ought to be) controlled by the decision-maker? That is, what conditions of success can (should) those involved control?

<p>He explained that the project proposal was submitted to the Dutch government who once they approved it, handed over most resources to the associates “at UMU”. UMU therefore has control over most of the resources. The management of the project from the Dutch side is done by VU. The control they have is in the fact that if UMU want to change anything about the project, it must first be presented to the Dutch government via VU again for approval.</p>
<p>3) What conditions are (ought to be) part of the decision environment? That is, what conditions can (should) the decision-maker not control (e.g. from the viewpoint of those not involved)?</p>
<p>This question was not answered to our satisfaction and is not discussed here.</p>
<p><i>Sources of Legitimation:</i></p>
<p>1) Who is (ought to be) witness to the interests of those affected but not involved? That is, who is (should be) treated as a legitimate stakeholder?</p>
<p>The project coordinator believes that UMU is the main legitimate stakeholder who has appointed other role players on the project to act on their behalf. On the highest level is the Deputy Vice Chancellor for Finance and Administration with two coordinators for the project reporting to the DVC. He emphasized that there is no other legitimate stakeholder.</p>
<p>2) What secures (ought to secure) the emancipation of those affected from the premises and promises of those involved? That is, where does (should) legitimacy lie?</p>
<p>The project coordinator assumes that emancipation from the project and sustainability of the project will be secured by “following the work plan”. He expressed his satisfaction with the way in which the work plan has been adhered to up to now. A discussion followed where the three interviewees pointed out the importance of involving full time staff to ensure sustainability. One interviewee mentioned the lack of ownership if part-time staff is involved, which according to her is not the case with full time staff – “but for me, the course is mine. I have participated in developing it, I own it” (This interviewee was involved in the ICT management course where the co-author explicitly followed a participatory approach in the development of course work). Another interviewee expressed her concern that sustainability can only be reached if they start targeting a “future market that is not there now”. She proposed that not only Kampala’s formal sector should be involved, but also small business or students working on donor funded projects.</p>

3) What worldview is (ought to be) determining? That is, what different visions of “improvement” are (should be) considered, and how are they (should they be) reconciled?

A pertinent question was asked on whether they think UP has a different view of what is meant by “improvement”. The project coordinator answered the question by giving a list of things that need to improve on the project and at UMU. He mentioned higher intake of students, increased contact time – move from 6 – 8 weekends, getting Internet connection, upgrading staff qualifications, setting up a research centre with facilities and training in research methods and skills. He believes that UP will agree with these steps towards improvement. He re-emphasized that with the planning of this project, “we thought about everything. Everything is working. Everything is working perfectly” and that “everything is going according to plan”.

The lecturer with the ICT4D background mentioned that she prefers working with a South African University. “South Africa is at a good position for us. It has a developed formal sector and still has understanding of rural Africa. the lecturers have understanding of both worlds.”

UP’s concerns

The opinions given below were obtained through informal discussions, e-mail communication, observations and reports submitted by the UP lecturers. UP lecturers consider themselves as experts in this project and as experts they act as course designers, trainers and course evaluators.

Although the interviewees were quite satisfied with the smooth running of the project, not all UP lecturers feel the same. The following concerns were raised:

- Some UMU lecturers have a computer science background with no or little exposure to the course content of these courses. One UP lecturer expressed his concern that one cannot change the mind-set of a computer scientist into that of a management oriented ICT practitioner in just ten days. He based his remark on observing the UMU lecturer teaching as well as the assessment opportunities created.
- The fact that one UMU lecturer simply did not teach all the content provided to him by the UP lecturer is a matter of great concern to the particular UP lecturer. The assignments and tests were also provided by the UP lecturer and since only a part of the work was

done, the assessment opportunities were also decreased. According to the UP staff member this particular course was presented below acceptable quality. It was not the opinion of the UMU courses lecturer though.

- At this point, only three courses have been completed. Two of the three UP lecturers complained that they have not seen the exam scripts although it was promised to them. They have seen some assignments but consider this irrelevant since they only saw it after the exam was written.

In the next section we bring the views of UMU as identified in the interviews and the concerns raised by UP together to reflect on UP's role in the project.

DISCUSSION

Reflecting on UP's role as course designers

It is clear that once the course leaves Pretoria with the UMU lecturer, it will be appropriated either to local context, the lecturer's own background or to the limitations experienced in Uganda. Although UMU recognize UP as experts, it follows from the interviews that they have total perceived ownership of the degree and see fit to adjust the curriculum and content to their own circumstances. UP lecturers are concerned about the quality, the completeness and the relevancy of the content.

What are the implications for UP as course designers? We believe that the approach followed by some of the UP lecturers could cater to some of the concerns. Two of the UP lecturers followed a collaborative approach in the design of the course. For ten days with only an outline to start with, the UP and UMU lecturer decided together what the study guide should look like. The knowledge of the UP lecturer guided the process whereas the local knowledge of the UMU lecturer contextualized the knowledge. The UMU lecturer, who went through the process, experienced this as very positive: "the course is mine. I have participated in developing it, I own it".

However, as was pointed out by the project coordinator during the interviews, not all courses lend itself to this process – especially not the more technical courses. We believe that the answer still lies in collaboration and negotiation. The UP expert must understand that he/she has little

control over the content once the UMU lecturer leaves UP. The UMU lecturer is the owner of the course and the two of them need to collaborate on what counts as paramount knowledge, how the course content and delivery should be adapted and what could be left out. In this way, the UP lecturer has at least some influence on the basic content of the course. Openness and trust in collaboration and equal perceived power relationship in communication may be key to the success of this process. The relationship is then more a partnership instead of lecturer/student which it should not be according to literature. As researchers, we observed that for some UP staff members this shift in perceived position of power in developing course content presented difficulty since they, according to position the project initiators offered to them, assumed that they are the teacher/expert and the UMU lecturer is the student who should listen and learn. In such cases, we observed the UMU lecturer, back at UMU, to be open to adjusting and adapting course content for their own needs and context, but unable or unwilling to communicate his actions and decisions back to the UP staff member. This may have potentially created communication breakdown, conflict or distrust. It is our contention that UP lecturers are not training students but colleagues who will use UP's adapted and contextualised intellectual creations in their teaching. This is confirmed by the literature presented earlier and observed from participant observation fieldwork.

Reflecting on UP's role as course evaluators

From UP's perspective, VU as sponsor is a very important stakeholder. This is also the stakeholder to whom UP must report on their activities. Although not mentioned in the interviews by UMU, quality control is considered very important by UP and VU. However, the way in which it should be conducted was never stipulated explicitly. It is the duty of UP to conduct quality control but it is the duty of UMU to make that possible. This process should be reflected on and negotiated with UMU. Once implemented it should be coordinated collaboratively by the coordinators based at UMU and UP. A further possibility for capacity building with respect to quality control is to involve UMU lecturers as external examiners for some of our courses offered at UP.

The concept of quality may be somewhat elusive if one is not open to unexpected outcomes and new ways of innovation (Ali & Bailur, 2007; Avgerou, 2009). Learning from doing fieldwork, we suggest that quality may have different meanings for people from different contexts. For

some UP lecturers, quality may mean that a course is presented according to predetermined outcomes and approaches developed at UP and that not achieving that may imply failure or lack of quality. For the UMU lecturer quality may mean that his/her students are inspired through some exposure to ICT management thinking, to pursue a career in ICT management with an openness to innovation in the African context. Learning from Heeks' (2005) argument on the validity of MDG's and Avgerou's (2009) paper on innovation in ICT4D, one may question the enforcing of approaches onto different contexts or even be biased towards the UMU view of quality when considering the importance of ownership and sustainability in ICT4D initiatives. We do however, believe that addressing perceived power relationships through a sense of companionship, mutual acknowledgement (Čečez-Kecmanović, 2001; McGrath, 2005) and personal interest, facilitating dialogue and consensus building and an openness to *bricolage* and improvisation (Ali & Bailur, 2007) may also assist in defining quality and success in this and similar projects.

LIMITATIONS OF THE STUDY

We have given an overview of the UMU-VU-UP project which aims to design and implement an ICT management degree at UMU. We used Critical System Heuristics to determine the values and beliefs of three of the UMU lecturers. This is considered *research in progress* since we aim to conduct more interviews with the other UMU lecturers and UMU students as the project progresses. We also need to present the same questions to the UP lecturers. The opinions given here to present UP's concerns are only based on information communication, reports and observations. In addition, we need to listen to the voice of VU as the sponsor of the project. A very different picture may emerge once all these role players voice their opinions (including our own). The extent of unveiling our own values and beliefs will depend only on our ability to be "objective. This is a limitation, since knowingly or unknowingly, a blind spot will always remain and that will influence the interpretation of the data. The limitations of CSH as heuristic are acknowledged here of which the assumption that critique on boundary judgements alone is adequate to unveil values and facts hold by stakeholders. However, we believe that this limited peek into the world of the UMU lecturers provided us with helpful insights into how to approach our role in this collaboration in terms of course design and course evaluation.

CONCLUSION

The practical contribution of this paper is limited to the stakeholders of this project. From an academic perspective, the paper contributes by providing another application of CSH for reflective social practice. The same concerns highlighted by literature were experienced by us, especially the tediousness of the lengthy interview process using this set of questions. However, in our specific case, the explicit questions on sources of knowledge and sources of power provided very helpful.

The paper also adds another voice to the contentious issue of sustainability. From the interviews it is clear that UMU believes that this is a sustainable project, i.e. it will carry on after the other stakeholders withdraw. From UP perspective, we are concerned about the sustainability of the quality of the degree. We proposed negotiation regarding the process of quality control. However, the term quality is value-laden with the implication that all stakeholders need to open their minds to reach a negotiated or “bricolaged” meaning of the word.

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