Digital Bridges for Vocational and Educational Training

- Digital Video used to enhance capability of training centres in East Africa
- Collaborators moved from a relatively disengaged and hesitant position towards engagement with the medium and acceptance of its application
- The use of the Internet to promote networking was found to have severe practical limitations and had low acceptance. The rich media being created were handled through offline delivery and networking
- The group of three collaborators have established an apparently sustainable and continuing programme of content creation for vocational training
- The model of regional collaboration is believed to have wider application in local content creation

This project, funded by DFID and undertaken by Big World in collaboration with Gamos Ltd., aimed to assess the value of multimedia and Internet based resource creation and collaboration in extending the ability of training centres to train effectively. The focus was on centres responding to the needs of the poor; delivering training which improves employment opportunities and therefore the livelihoods of trainees and their communities.

It was based on the philosophy that local centres can best judge training needs, and that by empowering them by providing training in tools which they could take ownership of - Internet, video, multimedia, CD Rom etc - they could replicate and reinforce training.

It was also based on the suggestion that enabling centres to dialogue with each other and share experience and concrete training resources would increase the effectiveness of all participating centres. It took place at a point in the development of ICT based initiatives where there is considerable interest in the possibilities of locally produced content, and dissemination, with associated rights management, of that content.

“To reduce dependency on donor funding, OKN aims to unlock the value and social capital inherent in local content. Once the initial support from OKN comes to an end, OKN Hubs must develop sustainable business models in order to continue operations.” http://www.openknowledge.net/

Our research attempted to focus on specifically defined ‘content’ in the area of vocational training in specific subject areas (agriculture, woodwork and metalwork) which would be relevant and valued by particular groups, allowing them to replicate and extend delivery of training, and where there would be potential benefit to all parties from sharing of this information between groups.
Many ICT projects focus on giving access to ICTs in order to learn ICT skills for use in the new urban economies. However there is a need to support basic skills for sustainable livelihoods in urban and rural settings. This project focuses on the dual role of ICT to strengthen communication within the development sector, and livelihood content delivery. The proposed approach emphasises audio visual content delivery to circumvent barriers of literacy and allow collaborative versioning into different languages.

**Activities**
a) Utilising DV digital video cameras, laptop computer based editing systems, and ‘user friendly’ editing software.
b) An iterative programme of training which pursued a descending gradient of training inputs, and an ascending gradient of ownership and sustainable application of the medium resulting from: Feedback on concrete exercises, Objection handling, Problem solving, Matching the medium to situations regarded as relevant and strategic by collaborators, ‘Training the Trainers’ – trainees sharing knowledge and skills with further trainees, Increasing ‘ownership’.
c) Development of an inherently low bandwidth-requiring web environment for networking between collaborators, with regular introduction and demonstration of this ‘hub’.

**Follow-up, support and development**
It was clear from previous projects that developing understanding and achieving ownership depends on an iterative process which allows two way dialogue, negotiation, feedback and re-enforcement. The programme therefore included a total of five visits with each collaborator:
1. Initial survey visit
2. Initial training workshop (focus on video skills)
3. Second training workshop (focus on programme composing skills)
4. Third training workshop (follow up and project development)
5. Final assessment and feedback visits

**Conclusions**
As the project went on it became clear that despite the offer of support for upgrading Internet connectivity, there were real hurdles to this taking place. In some cases (ie for KHC and Selam) the monopoly ISP offered a very limited service, so increased bandwidth, and the opportunity to transfer large files, was not possible. Furthermore unreliability and lack of individuals with email accounts resulted in the Internet not being perceived as the medium of choice for communication and collaboration.

The project focused, in the main, on five core collaborators. It demonstrated very striking outputs with a group of three, and more limited results with the remaining two. The three collaborators based in Kenya and Uganda, moved from being sceptical about the realities of ICT use in their current educational systems, to a positive ownership of the ideas, an ongoing sustainable creation of local content and a collaboration between themselves and others. In addition, the study recorded evidence that the three ‘active’ collaborators were continuing the initiative after the conclusion of the formal study.

The two collaborators who had more limited results were based in Ethiopia. Here it was the combination of external factors, such as the State monopoly on Internet connections, and institutional factors such as management structure and physical locations, that limited the outcomes. The Ethiopian partners will continue in a limited way to develop the role of ICTs in their teaching systems.

The use of digital video proved successful. The centres were able to learn how to make videos and edit them to a high standard, in a few weeks of training. With no special video or computing background skills, trainers were able to learn camera use, video editing, script writing and video delivery. Furthermore, the cost of setting up the video editing was very small compared to the cost of an editing suite five to ten years ago.

The project also worked with the teaching staff to assess whether the resultant locally-produced teaching materials communicated to the students. It found that students found the materials useful and were able to attain higher test scores on subjects delivered by video.

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