

**Interim report on the Higher Education Academy  
Education for Sustainable Development project:**

***“Welcome to the Sahel”: an interdisciplinary resource-bank of sustainable development perspectives for English, environmental science, history, and religious studies undergraduates”***

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**Aim**

The aim of this project is to increase awareness of sustainable development issues by extending the present field-led or documentary-led experiences of undergraduates studying history, environmental science and religious studies to consider the sustainability of societies from a remote, environmentally sensitive region: the West African Sahel.

**Project outline**

This project is developing a learning and teaching resource considering sustainability issues arising from the Sahel region of Africa. These include different perceptions of sustainable resource use - religious and cultural, and human responses to environmental change. The resource-bank is designed to stimulate trans-disciplinary interaction between undergraduates from several different subject areas. Resources are all electronic media-based including: podcasts of fieldwork, lectures and seminars; streaming-video of ethnographic film; and scanned historical cartographic/documentary materials. The resource is presently being built, refined and tested. It will be launched through an undergraduate symposium in spring 2008.

**Key milestones – May to November 2007**

The deliverables of the project in terms of key milestones have been met to date. The scope of the resource has expanded in that greater emphasis on ease of student access through the University of Stirling virtual learning environment and the types of input has been integrated. Consequently handling of copyright protection issues and data security over and above that originally envisaged have been addressed.

***Milestone 1. Database construction***

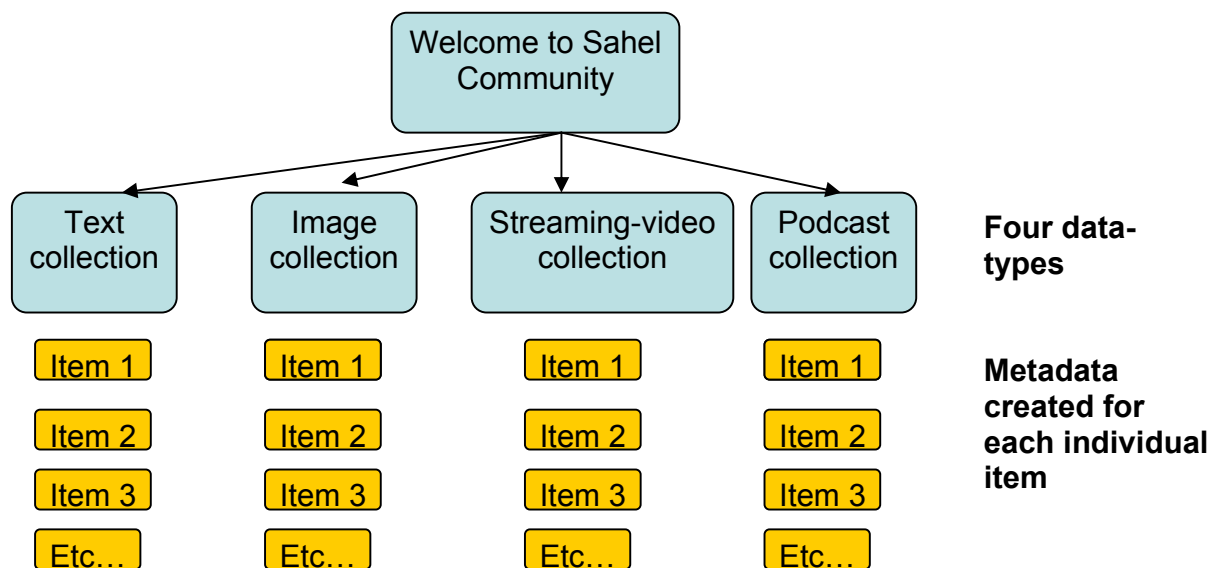
The Welcome to the Sahel Resource Bank of electronically-stored teaching materials suitable for use across disciplines has been constructed using a variety of database and virtual learning environment software. The digital depository database DSpace ([www.dspace.org](http://www.dspace.org)) has been extensively customised for use to hold the materials. This software was selected after considering and testing several alternatives. DSpace is an open-source database designed to allow preservation and ready access to scholarly work. It has the advantage of being extremely

scalable, and can be customised to meet specific needs. This means that the project can grow significantly in future beyond the scope of the present project. For Welcome to the Sahel the type and structure of the metadata, the range of and storage of different media have both required significant customisation of this database. The significant disadvantage of a Dspace database is that it is designed primarily for completely open access. Given that open access is not possible given legal issues surrounding copyright, significant efforts have been made to protect the resource. This has been undertaken with two different layers of software protection such that the materials can be accessed only by registered Stirling students and Stirling academics.

**2. Database contents**

Materials for inclusion in the database have been collected and collated. Where necessary, and where suitable copyright permissions are granted, these have been purchased. The first items to be installed in the data-base were texts of conference “grey” literature. Streaming video of ethnographic films have been successfully compressed and mounted in the database. Podcasts of field-work are presently being developed (PI is undertaking field work in northern Nigeria, November 2007).

Given the different types of media stored in the data-base and the possibility of scaling the work to something larger in the future, specific attention has been given to database metadata. The Dublin-Core metadata system has been used, providing commonality to existing University of Stirling Library catalogue keywords. The structure of the database is shown in Figure 1.



**Figure 1. Welcome to the Sahel database structure.**

Each data-type has a different set of metadata associated. Also, the database structure is flexible such that should it become necessary to define a new data-type (e.g. maps, rather than text), this can be readily implemented.

### **3. Copyright protection and approvals**

Legal issues relating to the submission and use of data are obviously of major concern. Considerable effort has gone into establishing that each item entered into the database has copyright approval. For instance, special approvals for an archive of Francophone Sahelian films held in Stirling are presently being sought. Two common situations are encountered: First, where the academic depositing an item has generated the material themselves and is transferring copyright. This is done on a non-exclusive basis allowing the academic further use of the material. Second, where a material is from an external source (i.e. not being submitted by the copyright holder) and already has copyright attached. To cover both situations, a standardised legal agreement (copyright license) has been drafted. This prompts an approval notice for submissions from academics contributing to the database. Records of copyright owner submissions, as well as copyright transfer/approval for use of all other materials are being maintained and archived (paper-based). Overall, the mechanisms of submitting data have been created and we foresee a smooth expansion of the Welcome to the Sahel resource bank.

### **4. Student Access to database**

To target student interest towards the materials within the database and to protect the database from unauthorised use, the University of Stirling's virtual learning environment (WebCT) has been adopted as the student access point to Welcome to the Sahel. This provides a ready method of authorisation for access to the database. Student access can be managed either to allow searches and viewing of the whole database, or may be as a link to a specific item, or set of items. The latter option gives an academic teaching a specific course the possibility of promoting a targeted interest using what are increasingly familiar VLE tools. Initial use of the resource (alpha testing), has commenced (October 2007) with an Environmental Science class having access via a simple VLE link to a contextual ethnographic film. In doing so a linkage between environmental process-based understandings and cultural issues of food production for local subsistence is being promoted.

The participating modules for spring semester 2008 (beta testers) have been identified across each of the discipline areas. These are from each year group (Semester 2-8) of students. Additionally the resource will be made available to Masters-level students across the University.

### **5. Management of project - Advisory committee and alpha testers**

An advisory committee to the project has been formed comprising staff from the participating departments including Information Services (database hosts). Initial alpha testing is ongoing (as of 5 November 2007) with Semester 5 students in Environmental Science. Additional specialist advice, beyond the remit of the advisory committee, has been sought and continues to be used in respect of copyright issues.

## **Key Expenditure to date**

### **1. Staff replacement**

Casual employment of a Post-Doc. allowing PI to develop database and contents.

### **2. Consumables and software**

Video software - Ulead Mpeg4 editing software, Apple Quicktime editor

Sanyo Xacti solid-state recorder

Qubase audio-editing software

Solid-state video and audio recording media

Purchase of ethnographic DVDs

Purchase of maps and text materials

### **3. Undergraduate-symposium, conference travel and Evaluation**

Not applicable to date

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5 November 2007