

## Technology and Innovation

### Harnessing the Power Of ICT in ODL - A Case Study Of Open College - University Of Papua New Guinea

#### Introduction

In Technology and Innovation Theme, my abstract paper is a case study of harnessing the power of ICT at Open College, University of Papua New Guinea to teach in ODL.

Today internet has so much information out there that ODL students can use to learn for themselves. ODL students are self-learners, unlike the conventional classroom student-teachers settings. However access to internet is not available to all students. Some students are in remote study centres, others are in the cities. Internet access is also very expensive in Papua New Guinea.

Thus Open College has come up with following strategies to teach the OLD students;

- Moodle as Open Source software for Course Management System
- Adopt Adobe Connect for Online Teaching and Tutorials
- Connect 23 Study Centres with local telecommunication company to provide internet and interconnectivity
- All course and learning materials are accessed from Open College head office servers.

The following are main 4 systems Open College has adopted to reach the ODL students.

#### 1. Moodle – Course Management System

Moodle is Open College choice for course management system. Open College, after considering other course management systems available, like Blackboard, have chosen to use Moodle. Moodle is Open Source and there is ongoing development and support by the Open Source Community. It is a free web application that educators can use to create effective online learning sites used by educational institutions all over the world

According to [moodle.org/sites](http://moodle.org/sites), there are 77 234 currently active sites that have registered from 229 countries.

At Open College, we have designed our Moodle that is running all the courses that Open College offer on Distant Mode. Open College lecturers are busy working away putting all the courses on Moodle.

Open College has ongoing Moodle Training for staff and students. Moodle and ICT trainings have started in 2012 and will continue indefinitely. Lecturers are introduced into the Moodle environment and trained how to build an interactive course using various Moodle resources and activities available. The students are trained how to use various features of Moodle courses, the Moodle environment, resources and activities of Moodle.

The screenshot shows the Moodle interface for UPNG Open College Online. At the top, there is a dark blue header with the university's logo and name. Below the header, a breadcrumb trail reads 'Home > Courses > Course categories'. On the left, a 'Navigation' sidebar contains links to Home, Site news, Open College Website, Guide to UPNGOC Moodle, UPNGOC Forum, UPNGOC Chat Room, OC Moodle Guidebooks, and a 'Courses' section with a sub-link for 'University of Papua New Guinea'. The main content area is titled 'Course categories' and lists several course categories: 'University of Papua New Guinea' (with sub-items 'Crisis Management Strategies' and 'Project Management Strategies'), 'Open College', and 'CTCS'. Under 'CTCS', there is a list of courses: '6.00302 Business Skills 1', '6.00303 Business Skills 2', '6.00101 Numeracy 1', '6.00102 Numeracy 2', '6.00103 Numeracy 3', '6.00104 Numeracy 4', '6.00401 Literacy 1', and '6.00402 Literacy 2'.

Figure 1 Open College Moodle with Online Courses

## 2. USIS – Students Information System

University Student Information System (USIS) is the student management system used by Open College to administer students, enrolment, admission and programs. USIS is used to manage students from enrolment to completion of a course. Transcripts and Grades are managed by USIS. USIS is built by staff at the main University IT services.

The other Student Information System being looked at by Open College for future include Tribal system from TribalGroup (UK), Jasper and Calista (Australia). These systems have other functions and features which USIS does not have including Finance, HR, and Online registration Modules.

## 3. Adobe Connect – Online Teaching

Adobe Connect is software used to create information and general presentations, online training materials, web conferencing and user desktop sharing. The product is entirely Adobe Flash based. Adobe Connect features include unlimited and customizable meeting rooms, multiple meeting rooms per user, VoIP, audio and video conferencing, meeting recording, screen sharing, notes, chats, user management, administration, and reporting.

### Features Of Adobe Connect

- **Multiple Online Meetings**  
Can run multiple online and live sessions such as teaching and tutorials to multiple locations at the same time
- **Screen Sharing**  
Can share Presenter's screen with distant users or participants
- **Meeting Recording**  
Can Record Meetings that can be replayed later
- **Collaborative / Interactive**  
It is Interactive with the Presenter and Participants
- **Cost Saving**  
Does not require travelling, thus saving costs for Tutor / Lecture travelling to Study Centres to teach distant mode students.

Open College has trialed Adobe Connect for Online Teaching in ODL. It is a useful tool for Collaborative and Interactive Pedagogic Transactions in ODL. Adobe Connect will feature prominently in Open College for teaching its ODL students. Open College also trialed other online teaching software such as Skype and Goto Meeting. However Adobe Connect meets Open College requirements.

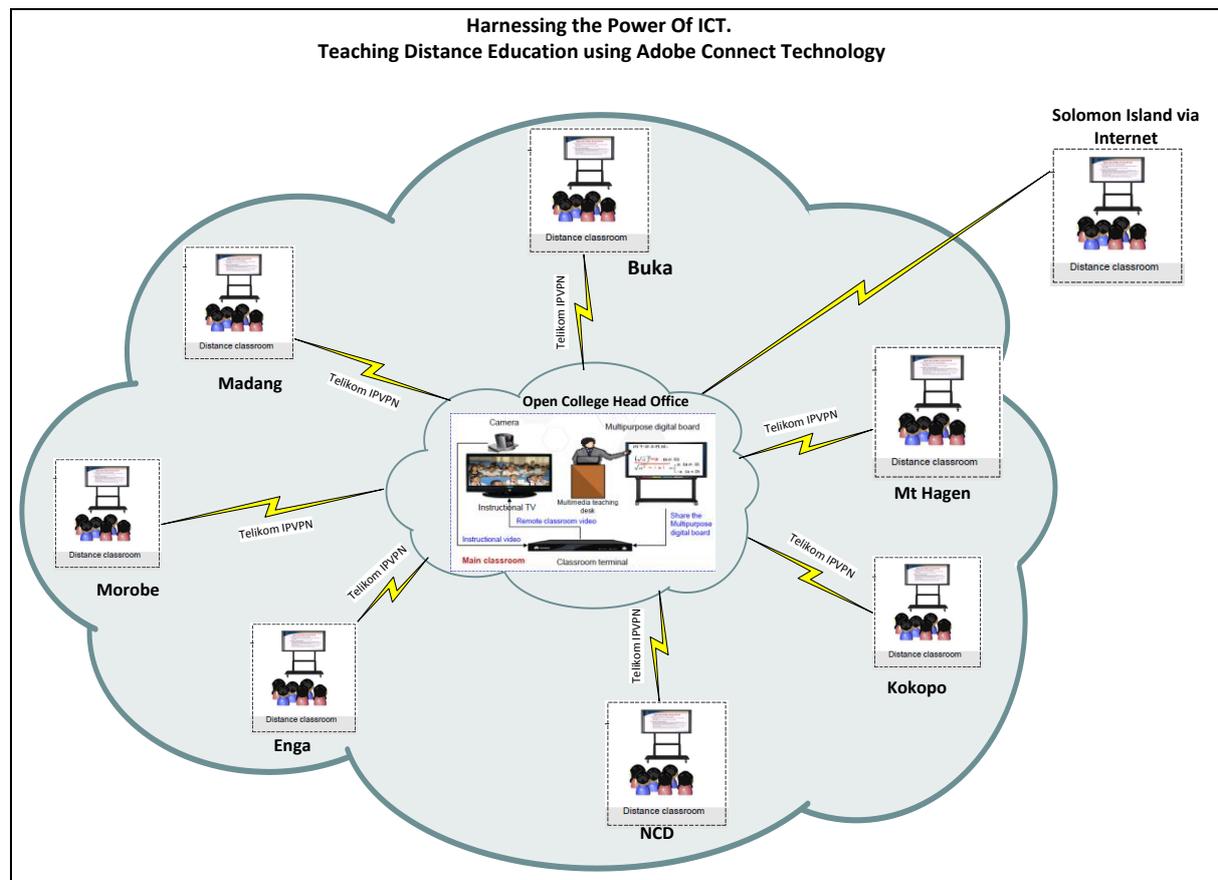


Figure 2. Online teaching using Adobe Connect

#### 4. Telikom Service Provision Agreement

In June 2012, University of Papua New Guinea (UPNG) and Telikom PNG, a local telecommunication company signed service provision agreement for provision of internet and interconnectivity between UPNG Open College and its 23 study centres spread through Papua New Guinea. Under this agreement Telikom PNG will provide 2mb IPVPN links to the 23 study centres and connect back to UPNG Open College, thus creating a bigger Open College Wide Area Network (WAN).

With the provision of IPVPN links, the 23 study centres will access learning and course materials, Moodle, Adobe Connect and other resources from Open College head office with no costs to the students. All learning materials for students to learn will be made available on Open College head office servers and they can be freely downloaded by students from the study centres.

Each study centre will be equipped with a computer lab, a server and audio visual equipment for Online teaching.

