Technology Options for Distance Learning Delivery Between American Samoa Community College and American Samoa Department of Education – Manu'a Sites

In determining the feasibility of distance learning between the American Samoa Community College (ASCC) and the American Samoa Department of Education (ASDOE) – Manu'a sites, the technology points considered are 1) network connectivity, 2) hardware, and 3) software options. The following describes the current situation at ASCC and ASDOE that could allow for successful distance learning communication.

Network (Internet) Connectivity

ASCC currently has broadband Internet connection that allows for Distance Learning activities to be available on campus. Currently, ASCC can dedicate at least 768kbps to distance learning activities.

According to Bone Ta'ase of the DOE Educational Technology Division, all schools in Manu'a are connected to the Internet. On the island of Tau there are 3 schools:

1. MHS - On Tau village
2. Fitiuta Elementary - Fitiuta Village (This is where the airport is at)
3. Faleasao Elementary - Faleasao Village (This is where the MV Sili docs)

On the island of Ofu and Olosega there is only 1 elementary school.

4. Olosega Elementary.

On Tau all three schools are connected via fiber to ASTCA's CO on Tau. The Olosega elementary connection to Tau is via Microwave. The ASTCA CO is then connected to ASTCA's CO on top of Olotele via Microwave. From here they connect to the DOE network via fiber.

When the CO in Manua goes down all schools are down. If the CO ontop of Olotele goes down Manua will be down as well. The network connectivity to Manu'a relies heavily on ASTCA's support.

Because there is network connectivity on both ends, ASCC and ASDOE - Manu'a, it is possible to deliver distance learning, using this network accessibility between the two end points.

Hardware

Currently at ASCC, the options for use in terms of hardware for Distance Learning are a) Video Teleconference Units complete with high definition television units and Bose speakers, b) Mac computers with network connectivity, c) PC Computer with network connectivity.

In addition to the VTC option, there is also the option to use other software to communicate remotely through the use of PC or Mac computers. These options are discussed further under the Software section.

In order to deliver distance learning to the Manu'a sites, similar equipment needs to be present. PC or Mac computers are required. A screen to show the instructor during the courses is also a requirement. This could be via the VTC unit, or it could be the monitor for the computer unit. Finally, whatever software that will be used from the ASCC Site to deliver these courses would need to be installed at each of the Manu'a sites that is scheduled to have the distance learning courses delivered to.

Software

ASCC uses the Moodle eCourse Management System. This is the same software that the Department of Education uses for their classrooms. In the past, DOE and ASCC have partnered in teaching courses using the Moodle system.

Moodle is an online management system that allows instructors to host all course materials online, including handouts, powerpoint presentations, quizzes, tests, and even student grades. Students have these resources available to them as long as they have internet connection and a login to the Moodle site. Students get their login information from their instructors.

As discussed before, there are software alternatives to using VTC units for distance learning. These alternatives include Google Talk, Skype, Oovoo, and Vsee. Such software allow for communication online with the use of audio and video. These in particular are free. Other similar remote communication tools that have fees include Go2Meeting and Webex. These are options are available as communication tools for distance learning.

Again, for the distance learning to be successful, whatever software that will be used at the ASCC site, will need to be loaded, tested and used at the Manu'a sites. The software loaded on the Manu'a site computers and units is entirely dependent upon what ASCC decides to use to deliver the distance learning courses and what type of communication setup is chosen.

Next Steps

The items covered in this report are technology options that are currently available largely at ASCC in order to deliver distance learning to the ASDOE – Manu'a sites. It also presented the network availability in Manu'a. It is established that there is network availability in order to deliver distance learning to Manu'a. The decision for hardware and software implementations in the Manu'a site would depend on what technology ASCC decides to use as its setup for distance learning.

The next step would be for ASCC to make decisions as to which type of technology and media would be used to implement distance learning. Once these decisions are made, it would be easier to decide what is needed on the Manu'a sites in order to move forward.

This report is limited to technological implementation for distance learning. There are planning for curricular provisions and registration activities that need to take place to successfully deliver distance learning to Manu'a sites. These considerations are not included in this report.