Abstract

In the vast tracts of 4 ½ million square miles of tropical, blue Pacific Ocean there are approximately 2000 tiny islands with nearly 400,000 inhabitants who are educationally underserved and who stand to reap enormous benefits from the implementation of a successful distance education program. The value of such an endeavor is readily evident; the difficulties in such a remote, tropical locale are unique and quite daunting. This paper discusses approaches that the University of Guam has taken in an effort to address the educational needs of these Pacific Islanders using various technologies, and talks about its efforts to promote distance education in the Pacific region.

A large map and a five minute discussion of the geography of our intended service area among the Pacific Islands is undoubtedly the quickest and most effective way to demonstrate the great need for educational technologies in the Pacific Islands. The island of Guam is a U.S. Trust Territory located in the Mariana Islands of Micronesia. The rest of Micronesia is our initial target area, but beginning from Palau in the west and extending to the Marshall Islands in the east is our potential customer service locale. This is an area of approximately 4 ½ million square miles of some of the deepest ocean waters on earth dotted with over 2000 tiny islands whose total land mass is only about 532 sq. miles housing nearly 400,000 inhabitants. Guam’s nearest island neighbor, outside the Mariana Islands is almost 1000 miles away. Even with these few statistics, the need for, and the benefits of a dynamic Distance Education program for people in the Pacific Islands becomes immediately apparent.

Our target islands are grouped into states within nations: the Republic of Palau, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia and the Republic of the Marshall Islands. In each capital city there is a two year regionally accredited college with a computer lab that has largely been funded and maintained through grants with the U.S. government. It is exceedingly beneficial for the people in these areas to have access to a two year institution of higher learning, and even more so to have access to a computer lab with Internet and email capabilities. It is a major link with the “outside” world.

Many special concerns have to be addressed when planning courses for the multiple, distinct populations found in the Pacific. This includes difficulties that arise as a result of different languages. Each Pacific Island nation has its own native language and customs. The language of instruction is English, but we must be respectful of the variety of cultures involved in such a diversity of populations, while keeping in mind that almost all of our students are second language learners.

Traditional cultural values are very strong, especially on the outer islands. The need for educational opportunities for girls is undervalued. Indeed, there are places where it is considered inappropriate for women to ask questions. If a woman wants to know something she is expected to ask a male relative in private who then asks the teacher, principal, or authority for her. This tradition could make comfortable communication between student and instructor considerably more difficult.

A major educational need in the islands is certification for teachers. Most of the teachers, particularly on the outer islands, although very dedicated, do not have four year college degrees and are therefore not certified teachers. From their own two-year institutions students can complete the required 100 and 200 level college courses, but they must have the upper division 300 and 400 level courses if they are to become certified teachers.

One approach for delivering the needed 300 and 400 level courses to the Islanders has been to send teachers from the University of Guam to the local campus during the summers. This has been done quite successfully on some of the islands. Although it is clearly more cost effective than attempting to bring 20 or 30 Islanders to Guam, it is still very expensive and inconvenient, and each professor can only address the needs of one group of students at a time. A protocol that allows the university professor to be available to many campus sites at once would be much more advantageous.

An additional difficulty with the traveling professor mode of delivery is that there are a number of courses that simply are not permitted to be taught during summer...
sessions. Many of our core teacher education classes have a practicum component that cannot be accomplished during summers when regular public school classes are not in session.

Some form of Distance Education seems like an ideal solution to the dilemma of placing necessary course content into the hands of the students who need it most. Over the years, several course delivery formats have been tried utilizing a range of technologies which have experienced varying degrees of success. Combinations of videotapes, CD’s, televised instruction, Internet web pages, audio and video conferencing, computer discussion boards, email, and regular mail have been tried, each one contributing to the overall body of acquired expertise. Partially due to the many time zones involved, use of virtual classroom and synchronous communication has expanded slowly.

Most recently a distance education course was piloted through the College of Education utilizing a web page set up through the University of Guam’s Computer Center. Course content was delivered via the university’s Internet system and communication between students and instructor was primarily through the use of postings on a discussion board and email. Although the students have been generally successful using this format, the instructor stated that this method of communication is extremely instructor intensive, requiring more time devoted to the distance class than is customary in the preparation, delivery, and evaluation of a regular face to face class.

Students enrolled for our distance education classes are required to have access to their local college campus and computer lab. Many first-time Distance Education students are uncomfortable with technology in general and computers in particular. Initial start-up training, including how to turn on the computer and how to access the program, is provided by a local facilitator on the campus. The first lesson in the course is devoted to teaching how to navigate around the instructional site. This does not imply that the course content itself is made simple, merely that maneuvering around the instructional site must be very self evident, and that vocabulary must be appropriate for second language college students.

Although all the island campuses have adequate computer labs, air conditioned facilities with Internet connections, printers, and sometimes a camera for efforts at video-conferencing, there is a definite problem with maintenance and repair. Trained computer repair technicians are difficult to come by. Parts are expensive and take a very long time to arrive on the island. A reliable, continuous source of electricity to power the equipment is almost unheard of throughout the region. Power surges are frequent. Power outages are even more frequent. And yet, the labs still function. Students fill them daily and use the computers whenever they are available.

A final factor, unique to tropical areas, is always the master of all contingencies, plans, and efforts: the weather. Most of the time the weather is magnificently serene, warm, breezy, and humid. Just like in all the travel brochures. One industrious professor, a few years ago, sent along videotapes to accompany course instruction. As the video tapes sat between semesters over the summer break inside a sturdy cardboard box in a nice warm, moist closet, it turned out to be an excellent breeding ground for mold. The video tapes were ruined, but there were a number of insects who found the accommodations quite suitable. Even stored CDs are susceptible to damage from humidity and mold.

The mightiest of all weather phenomena in the Pacific is the typhoon. A typhoon can sweep through a region devastating everything in its path. Although there is a “typhoon season,” there is no month of the year during which typhoons have not occurred. In the aftermath of a typhoon, damage to computer labs can range from minimal flooding and a week of power outage, to broken windows, water soaked buildings, ruined equipment and destruction of the power source. Computer labs that have adequate typhoon shutters are fairly safe from the worst of the storms’ ravages, but are still at the mercy of the local infrastructure to provide electric power.

The university’s efforts to deliver a reliable and sustainable distance education program to Pacific Island populations are on-going, gradually improving with each new effort. Every pilot course gives new insight into what works and what does not. Although there is still much to learn, it is safe to say that we are getting better with each new venture.

References


