Association for Information Systems AIS Electronic Library (AISeL)

AMCIS 2010 Proceedings

Americas Conference on Information Systems (AMCIS)

8-2010

Going Global: A Faculty Connection between Peru and the United States

Larry Booth *Clayton State University*, LarryBooth@clayton.edu

Elizabeth Vidal de Garcia San Agustin National University, evidal@hotmail.com

Vickie Booth Georgia WebBSIT, Vickie@GeorgiaWebBSIT.org

Eveling G. Castro Gutierrez San Agustin National University, ecastrog@yahoo.com

Follow this and additional works at: http://aisel.aisnet.org/amcis2010

Recommended Citation

Booth, Larry; de Garcia, Elizabeth Vidal; Booth, Vickie; and Gutierrez, Eveling G. Castro, "Going Global: A Faculty Connection between Peru and the United States" (2010). *AMCIS 2010 Proceedings*. 560. http://aisel.aisnet.org/amcis2010/560

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2010 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Going Global: A Faculty Connection between Peru and the United States

Larry Booth Clayton State University LarryBooth@clayton.edu

Vickie Booth Georgia WebBSIT Vickie@GeorgiaWebBSIT.org Elizabeth Vidal de Garcia San Agustin National University <u>evidal@hotmail.com</u>

Eveling G. Castro Gutierrez San Agustin National University ecastrog@yahoo.com

ABSTRACT

In 2003, the University System of Georgia sponsored the Peru Summer Institute for Faculty Development. A fortuitous meeting between Peruvian and U.S. faculty led to a faculty exchange with the shared goals of expanding cultural horizons, enhancing faculty through improved teaching and collaboration, and preparing students for the increasingly global reach of information technology. The experiences of this faculty exchange provide a framework for future collaboration between Peru's information technology professionals and their colleagues in the United States. But perhaps more importantly, faculty and students discovered a synergy between designing information technology systems and the cultural contexts under which such systems operate.

Keywords:

Faculty exchange, educational exchange, cultural exchange, international cooperation

INTRODUCTION

During the summer of 2003, The University System of Georgia sponsored the Peru Summer Institute for Faculty Development. A dozen professors from several Georgia universities spent two weeks touring Peru, visiting historical sites and making contacts with colleagues in several of Peru's Universities. In Arequipa, professors from Georgia met with faculty and administrators from San Agustin National University. During the course of two days, faculty from both institutions met with members of kindred disciplines. The meeting between information technology faculty from Clayton State University and the Systems Engineering faculty of San Agustin University was especially fruitful. These initial discussions led to a faculty exchange with the shared goals of expanding cultural horizons, enhancing faculty through improved teaching and collaboration, and preparing students for the increasingly global reach of information technology. The experiences of this faculty exchange provide a framework for future collaboration between Peru's information technology professionals and their colleagues in the United States.

San Agustin University

San Agustin National University (UNSA) was established in November 1828 in the city of Arequipa, Peru. In 1994, the Bachelor of Systems Engineering was created. This program consists of ten semesters with instruction in computer science, mathematics, networking and communication, and software engineering. Students are expected to conduct research and complete a capstone project.

Clayton State University

Clayton State University (CSU), 15 minutes from downtown Atlanta, was founded as a community college in 1969, and was elevated to baccalaureate status in 1986. The university currently offers over 40 undergraduate degrees and an expanding array of graduate degrees. Clayton State was among the first universities in the United States to require each student to have a laptop computer. The Department of Information Technology was formed in 1998. A new college was formed to house the computing disciplines, the College of Information and Mathematical Sciences (CIMS). Currently, CIMS offers undergraduate degrees in Computer Networking, Information Technology, Computer Science, and Mathematics. CIMS offers two graduate

degrees: Master of Arts in Teaching Mathematics, and Master of Archival Studies. In consortium with four other University System of Georgia universities, the IT Department offers an online Bachelor of Science degree in information technology.

PRIOR LITERATURE

Though little in the literature addresses faculty exchanges between and among schools of information technology, there are a few examples of successful faculty exchange programs in other disciplines. These provide some insight into common problems and a starting point for developing guidelines for success.

Lange and Ailinger (2001) support the idea that faculty exchanges, rather than student exchanges, can be a cost effective tool for meeting international curriculum goals. Here, the exchange was between nursing faculty in Chile and the United States. Faculty benefit from learning about issues that affect all countries (in this case, health problems). Students benefit by seeing alternative approaches to health care, especially the use of information technology to gather and analyze data. Lange and Ailinger also address cultural differences and discuss some barriers that language presents. Communication, in fact, is the centerpiece of their international faculty exchange model. They emphasize four additional areas: Pre-exchange planning, Academic activities, Sociocultural events, and Follow-up evaluation.

Sisco and Reinhard (2007) document a faculty exchange in which communications and business professors "travel abroad for brief guest teaching visits." The faculty exchange in this case was between a school in Providence, Rhode Island and a university in Ravensburg, Germany. Of the many cross-cultural differences mentioned, this one stood out: American students are interactive. They like to express their ideas and opinions. Adjusting teaching styles to learning styles is a much larger issue when complicated by the addition of major cultural differences. Teaching in German classrooms was not as interactive as teaching in American classrooms.

Fryda (2004) speaks to the premise that students will benefit from involvement in international exchange. While Fryda's focus is on student exchange, the goal is similar to faculty exchange in that students benefit from international educational experiences. In addition, the students in this study were engineering and engineering technology students. Their concerns are more closely aligned with the problems of information technology faculty and students. Of the difficulties experienced by Fryda, two stand out: the cost of sending students abroad and the difficulty finding time in technical degree program curricula to send students abroad. Fryda outlines a short term exchange structure to address these problems.

Carmody (2009) echoes Fryda's sentiments regarding busy student and professional lives. He admonishes colleagues, nontenured or tenured, leading busy lives to take advantage of opportunities to teach abroad. Carmody, associate professor of Law at the University of Western Ontario, taught for a month at Universite' Montpellier in the south of France. Carmody offers several tips: Be prepared, good teaching is a challenge and more so in a new locale; clarify teaching obligations; be ready to work without internet connections, cell phones, or other resources as these may not always be available or reliable.

Carmody's nod to adequate preparation is echoed by Sarkisian (2006). While Sarkisian's book is titled, "Teaching American Students," the subtitle says more about its general usefulness to any teacher who must teach abroad, "A guide for international faculty and teaching assistants in colleges and universities." The book is a tour de force, a primer for the art of teaching. And yet, it is succinct. In five slight chapters, the book provides advice on starting out, assumptions that affect teaching, approaching students, giving presentations, leading a discussion, and understanding meanings beyond words. The book addresses a host of expected issues but the author's best work addresses the premise that different cultures have different assumptions about how students learn.

Signing a collaborative agreement is an essential part of any partnership between universities who plan to develop student and faculty exchanges (Anonymous, 2001). Dr. Earnestine Psalmonds played a central part in hammering out an agreement between North Carolina Agricultural and Technical State University and Senegal's largest university, Cheikh Anta Diop. Formalizing a relationship provides a working framework and outlines opportunities for both parties.

THE FACULTY CONNECTION

In 2005, an exchange agreement was negotiated between the administrative bodies of CSU and UNSA (See Appendix A). As noted by Psalmonds in (Anonymous, 2001), setting up a formal working relationship clarifies responsibilities for both sides. In this case general guidelines set in motion a faculty exchange and opened the possibility of future student exchanges.

Booth et al.

Since 2005, CSU has hosted three visiting professors from UNSA: In 2005, Elizabeth Vidal; in 2006 Jose Sulla; and in 2007, Eveling Castro. The faculty at CSU determined specific courses that would be assigned to their Peruvian colleagues. Material was sent in advance via email and air mail, though some books never arrived. Presumably they were delayed in customs. Visiting professors taught two courses in the Fall Semester (August to December.) The courses varied depending on the needs of the college, but included Foundations of Information Technology, Database Applications, and Project Management.

UNSA hosted two visiting professors from CSU, each for one-month teaching stints: Professor Jeff Chastine in May 2006 and Professor Jean Jacques Medastin in June 2007. Since CSU faculty were not in Arequipa for an entire semester, modules were designed to be incorporated into an existing UNSA course, Advanced Topics in Systems Engineering. The modules were developed in consultation with UNSA's head of Systems Engineering and CSU faculty. In 2006 Chastine covered "Augmented Reality" and in 2007 Medastin covered "Developing Web Applications with Ajax." Both topics were very novel to UNSA students at that time. In Peru, augmented reality is only taught in Post Graduate School.

Planning ahead, as suggested by Lange and Ailinger (2001) is essential so that exchange faculty have a clear idea of the material and the methods to be used. The planning activities practiced by UNSA and CSU helped facilitate the performance of faculty, providing a modicum of familiarity in otherwise unfamiliar surroundings. Faculty were also encouraged to participate in various academic activities while at their host universities such as faculty and committee meetings, sitting in on classes, attending lectures and various student activities.

TEACHING ABROAD

One of the goals of the faculty exchange agreement was promoting an awareness of and an appreciation for cultural differences. Two areas were anticipated and discussed by faculty: Language differences, both for students and faculty, and living arrangements for visiting faculty. A third area quickly became apparent. "Different cultures have different assumptions about ...how students learn" (Sarkisian, 2006).

Most UNSA students have basic English classes in high school. Many of them improve their English in private institutions. However, students have very little opportunity to practice English with native English speakers, especially in situations where complex ideas are communicated. Faculty from CSU might think that their UNSA students were "shy," but most of the time students were reticent because they have little practice speaking English. One of the best ways to improve language skills is to have more exposure to the language, and to speak with as many native English speakers as possible. In discussing the faculty exchange, it was decided that visiting professors from CSU should teach in English. This gave students increased opportunities to interact with native speakers and to develop their speaking and listening comprehension skills.

Rarely do students in CSU's service area master a foreign language. Visiting professors from UNSA were required to teach in English. Teaching in English was a big challenge for them. It meant extra time to prepare since sometimes it was necessary to practice pronunciation, or to create new examples more appropriate to the culture. Lange and Ailinger (2001) note that "moderate fluency in the language adds to the richness of the experience through interpretation of cultural cues." But UNSA faculty found that practicing the best way to express the right meaning takes time and consultation with colleagues.

UNSA and CSU students differ considerably in learning styles. American students are interactive (Sisco and Reinhard, 2007). They like to express their ideas and opinions (Sarkisian, 2006). This makes classes very dynamic. Visiting professors from UNSA added extra time in their classes for discussion. On the other hand, UNSA students prefer to listen and take notes. They usually don't like to express their opinions. Or if something isn't clear, they prefer to wait until the end of the class to talk to the professor. At first, CSU faculty feared students were just not interested in the topic, but later adjusted their teaching style to include more one-on-one conversations with students outside of class.

Living in a new country can be difficult and lonely. Many (Carmody, 2009; Lange and Ailinger, 2001; Sisco and Reinhard, 2007) mentioned faculty staying in apartments or hotels. For UNSA and CSU faculty, arrangements were made to stay with a faculty family instead of in an apartment. This gave the visiting professor the opportunity to learn more about the culture, and to have the facility to ask for help in case they had any doubt about the academic system (grading, teaching, using the local technology, etc).

ENHANCING FACULTY

Research

Booth et al.

Computing is an enormously vibrant field that continues to evolve at an astonishing pace. New technologies are introduced continuously, and existing ones become obsolete within a few years. In computing, much of teaching is driven by research. Many advanced courses consist of state-of-the-art topics. In order to maintain high quality education in a rapidly changing area lecturers should do research. When visiting UNSA, Professor Chastine gave a talk to the faculty regarding quality research. He provided several resources and stressed the importance of publication in peer reviewed journals. While UNSA faculty do conduct research, they now see expanded horizons in the publication of their ideas and work.

The newest computing research results, relevant information and textbooks are published in English. English is considered the computing discipline's lingua franca. UNSA professors should be able to communicate effectively in English in order to contribute effectively in cooperative international research. Fluency in English is needed to exchange ideas and/or express points of view. For UNSA faculty, the exchange program proved to be a very important opportunity to develop English skills. Further, participating UNSA faculty have become advocates in their university system, stressing the importance of communication skills in English for both faculty and students. They suggest that at least some courses at UNSA be taught in English.

Teaching

UNSA professors not only taught classes at CSU, they attended classes taught by CSU computing faculty. CSU faculty shared supporting course materials and these provided a basis for introducing new viewpoints into similar courses at UNSA.

For example, UNSA visiting professors attended the first-semester programming course at CSU, Computer Science 1 (CS1). This course is equivalent to the first-semester programming course at UNSA: Programming Methodology. At CSU, each student has a laptop computer. Classes are lab-oriented with many hands-on activities. UNSA faculty discovered that they could cover more advanced topics in the first semester programming course. The hands-on lab approach allows students to immediately test coding concepts as the professor explains them. They hope to introduce this paradigm to UNSA by scheduling the programming course in a laboratory format.

While visiting Peru, a CSU professor was introduced to the Inca quipu. While the Inca did not have a written language, they did have a number system. To record numbers, the Inca tied knots in colored string. Embedded within the numbers was a system of storing and transmitting information (Ascher & Ascher, 1997). Database students must balance the physical representation of data with theories of processing data into information. To give students a feeling for "real" data, data that exists physically, the Inca's knotted string system can be used. The introductory database class at CSU now uses the quipu to introduce and discuss the cultural context in which data and information are developed, coded, and interpreted.

Of particular interest to UNSA professors was the practice at CSU of posting lecture notes and lecture slides to the course web-page at least two days before the lecture. Every CSU course has an official webpage. The web environment allows faculty to post their notes, announcements, assignments, and forum discussions. Students read the notes and bring them printed to class. This practice allows faculty to cover more information since students do not spend much time taking notes. Additionally, students get a general idea about the topics before the lecture and come prepared to ask questions. UNSA has been working with free open-source course management software that allows simple delivery of content and online assessment. In addition, some faculty have experimented with Google Groups.

CONCLUSION

Many national universities in Peru suffer from isolation from the international academic community. There is very little budget available for international travel. This makes it difficult for universities to keep abreast of advances in the subjects they teach, particularly in fields such as information technology and computer science which change so rapidly. Faculty exchanges can provide a valuable experience if costs can be kept to a minimum. Providing a stipend to visiting Peruvian professors for teaching classes helps greatly to defer costs. Arranging for visiting faculty to stay with their faculty counterparts also helps. While initially intended to cut costs for visiting faculty, staying with a host family ultimately proved invaluable in fostering cultural exchange, and led in many cases to lifelong friendships. The communications infrastructure has improved greatly in recent years and may help to reverse the isolation felt by small universities in Peru. A commitment by North American faculty to developing contacts and conducting joint research projects would help as well.

Teaching for an entire semester placed strains on the Peruvian families involved. Also, semester boundaries do not often matchup between South America and North America. Even the climate is a challenge since the seasons are exactly the

Booth et al.

opposite. For the future, working with shortened or mini-semesters of four weeks duration may be a better solution. Clayton State is now actively involved with online courses. This could provide a rich source of collaboration for UNSA and CSU.

Most importantly, the goal of engaging students in a multicultural experience was realized in the classroom as returning faculty integrated a cultural perspective into assignments. Students began to see a connection between their studies and the world at large. In Arequipa, students benefit from more hands-on computer practice as they study programming. Designing information systems is a study in culture. To do it well, an IT professional needs to understand and relate to cultural subtleties. In Morrow, Georgia, students see that tying knots in thread can represent a rich data set, but interpreting the data requires knowledge of the culture that produced it. Viewpoints such as these are not generally emphasized in highly technical degree tracks.

Both universities recognize the importance and emerging need for their citizens to develop a global perspective. With the commitment both have shown to intercultural education a path is beginning to emerge that signals greater cooperation in the future. Both universities, as leaders in the information technology age, can contribute markedly to the success of international programs.

REFERENCES

Anonymous. (2001). N.C. A&T, Senegalese university sign collaborative agreement. *Black Issues in Higher Education* (October 25).

Ascher, M., & Ascher, R. (1997). Mathematics of the Incas: Code of the quipu. Mineola, New York: Dover Publications, Inc.

Carmody, C. (2009). University teaching abroad: A month in France. Academic Matters (February/March).

Fryda, L. (2004). *Short term international student/faculty exchange programs*. Paper presented at the International Conference on Engineering Education and Research, Ostrava, Czech Republic.

Lange, I., & Ailinger, R. L. (2001). International nursing faculty exchange model: a Chile-USA case. *International Nursing Review*, 48, 109-116.

Sarkisian, E. (2006). *Teaching American students: A guide for international faculty and teaching assistants in colleges and universities* (3rd ed.). Cambridge, Massachusetts: Harvard University Press.

Sisco, L. A., & Reinhard, K. (2007). Learning to see what's invisible: The value of international faculty exchange. *Business Communication Quarterly, September*, 356-363.

EDUCATIONAL EXCHANGE AGREEMENT

BETWEEN

CLAYTON STATE UNIVERSITY, MORROW, GA, USA

OF THE

UNIVERSITY SYSTEM OF GEORGIA USA

&

SAN AGUSTIN UNIVERSITY, AREQUIPA, PERU

Together join in issuing the following agreement to promote a closer international cooperation between the two institutions and to promote a better understanding between the people of the United States and the people of Peru through educational and cultural interchange.

This instrument will service as a general framework for inter-institutional cooperation between Clayton State University (CSU) and the San Agustin University (SAU). Based on mutual understanding, Dr. Robert H. Welborn, Director of International Education, CSU and (a person from SAU) are designated to coordinate the application of this agreement in the best interest of both the institutions.

WHEREAS, the two universities share common interests in education, training and development with a global perspective.

BE IT MUTUALLY RESOLVED AND AGREED that the cooperative relationship shall be carried out through such activities as:

- 1. Faculty Exchange: Exchange of faculty members or visiting faculty agreements to engage in teaching, research and/or study at each other's institutions will be encouraged. The number and conditions of such exchanges, including exchange or visit length, institutional obligations, and other matters shall be mutually agreed upon by the two institutions.
- 2. Student Exchange: Attendance of students from one institution to the other is encouraged. Each student must, however, meet the admission requirements of the departments or programs to which he/she applies. Each institution will investigate possible means of granting full or partial tuition waiver to qualified students.
- 3. Special Programs: Joint programs of teaching, applied research or conferences by faculty members or departments of the two institutions may be undertaken on either campus

upon agreements separately negotiated, this provision shall include special intensive training and long and short term student and faculty study abroad programs.

4. Exchange of Academic Materials: Both institutions agree to consider exchange of publications and library materials of equal value.

BE IT RESOLVED FURTHER that the colleges and other units of both the institutions are encouraged to reach specific agreements for cooperative exchanges and projects in their respective areas under this general agreement.

Any amendment and/or modification of this agreement will require the written approval of the Provost of CSU and the Vice-Rector Academico of SAU.

This agreement shall remain in effect for five years, at which time the continuation and expansion in other areas shall be possible by agreement.

CLAYTON STATE UNIVRSITY SAN AGUSTIN UNIVERSITY

President Thomas Harden	Dr. Rolando Cornejo, Rector
Sharon Hoffman, Provost and Vice President for Academic Affairs	Dr. Valdemar Medina Hoyos, Vice-Rector
Robert Welborn, Director of International Education	Dr. Luis Alfaro Casas, Decano de la FIPS
Date: December 19, 2005	