

CONFERENCE PROGRAM

Day 1, March 5, 2007

8:30-9:30am Conference Registration





Far left: Ms. Lillian Chargualaf and Ms. Fernabel Davis of the University of Guam provided assistance during the conference.

Left: 128 participants attended the 2-day conference at the Marriott Hotel in Tumon, Guam.

9:30-10:30am Opening Session

U.S. National Anthem and Guam Hymn

Welcome Remarks

Dr. James J. Taylor, Conference Co-Chair, Associate Professor of Finance, University of Guam's School of Business and Public Administration

Dr. Maria Claret Mapalad-Ruane, Conference Co-Chair, Associate Professor of Economics, Alfred University's College of Business

Dr. Barbara Wiens-Tuers, Conference Co-Chair, Associate Professor of Economics, Pennsylvania State University-Altoona's Division of Business and Engineering







Welcome Remarks by Dr. Vivian Dames, Acting Dean, University of Guam's College of Professional Studies



Introduction of the Keynote Speaker by **Dr. Anita Borja Enriquez**, Executive Director, University of Guam's School of Business and Public Administration



Keynote Speech by Mr. Gerald S.A. Perez, General Manager, Guam Visitors Bureau





The gift to Mr. Perez is an original ceramic artwork by Alfred University Graduating Senior Art and Design student Ms. Carin Sankus.

10:30-10:45am Coffee Break

Session 1: Doing Business in the Western Pacific

Chaired by Dr. Barbara Wiens-Tuers, Penn State-Altoona

GENERAL LIFESTYLE CHANGES PROGRAM FOR A GUAM BUSINESS: REPORT ON THE DEVELOPMENT AND PILOT STAGES* by Dr. Richard S. Colfax, Dr. Karri Perez and Dr. Rachel T. Leon Guerrero



Guam employees have physiological and health issues, including diabetes, overweight, dietary challenges and lifestyle issues. One local business is developing the Lifestyle Changes Program (LCP) to develop healthier lifestyles for employees. It will focus on three areas of 1) overall lifestyle practices; 2) dietary changes; and 3) stress management. The program will be voluntary and offered at no cost to the employees. The LCP will be implemented from January 2007.

This Presentation and Paper will report on the development and initial implementation of the LCP by three health and human resource professionals from Guam. Detailed program components will be described.

Presented by Dr. Richard S. Colfax

Associate Professor of Human Resource Management, University of Guam's School of Business and Public Administration

IS THERE SIGNIFICANT STATISTICAL RELATIONSHIP BETWEEN TOURISM VISITOR ARRIVAL DRIVEN ECONOMIES AND THE U.S. POLITICAL STATUS OF EMERGING NATIONS OF MICRONESIA: COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS, THE FEDERATED STATE OF MARSHALL ISLANDS, REPUBLIC OF PALAU AND THE TERRITORY OF GUAM U.S.A. by Dr. John Camacho Salas



The International Tourism industry is the primary economic engine for island economies of Micronesia. It is a "clean" industry without an industrial environment and one that has become sought after by citizens of larger nations seeking respite from their highly urbanized lifestyles. These emerging island nations of Micronesia comprise 3,500,000 square miles of ocean, approximately 2,000 individual inhabited islands, and a major growth in their lives and a change in their political relationship with the United States over the past two decades.

This paper examines whether this change in political relationship; i.e. from a Trust Territory administered by the U.S. to that of a compact of free association with a self-determination status, has had a statistically significant impact on these islands' primary economic engines.

Presented by Dr. John Camacho Salas

Associate Professor of International Tourism and Hospitality Management, University of Guam's School of Business and Public Administration

PROGRAMS THAT SUPPORT BUSINESS DEVELOPMENT AND FINANCING IN GUAM AND THE WESTERN PACIFIC





Presented by Mr. Joseph M. Diego & Mr. Jacob Punzalan

Area Director and Assistant-Western Pacific, U.S. Department of Agriculture Rural Development

12noon-1:00pm Lunch

1:00-3:00pm

Session 2: International Business

Chaired by Dr. Richard Colfax, University of Guam

CROSSING NATIONAL BORDERS FOR COMPETITIVE ADVANTAGE: TRANSNATIONAL EDUCATION THROUGH INFORMATION TECHNOLOGY* by Dr. Anita Borja Enriquez



This paper explores the relative advantage provided to an organization through the use of information technology. The digital age has enabled expedient access to information, narrowing the gap for marketing and strategy purposes. Quick response, a concept founded on the basis of efficient logistics processes for retailers, now transcends to communication flows across all industry sectors. This is critical to effectively compete across national borders. Despite the relatively cost-evasive means of data transmission afforded by the Internet, there is a concern of the cost of access to this form of information transmission to gain relative advantage in the global economy.

Presented by Dr. Anita Borja Enriquez

Executive Director, University of Guam's School of Business and Public Administration

ARE THERE REGIONAL SYMPTOMS OF CORRUPTION: THE EMPIRICAL STUDY OF THE EUROPEAN POST-COMMUNIST COUNTRIES* by Dr. Leon Zurawicki, with Dr. Miron Wolnicki





Using the competitiveness data for the countries of the Central and Eastern Europe and applying the entropy analysis, the areas of similarity and dissimilarity were identified for country comparisons as well as for the governance and corruption indices. Similarities allow for country clustering and reveal the scales which correspond with each other. Dissimilarities point to the areas of disagreement with some intuitive speculations. Both lead to recommendations for future research.

Presented by Dr. Leon Zurawicki

Professor of International Marketing, University of Massachusetts Boston's College of Management

THE DISRUPTIVE POTENTIAL OF CULTURAL BACKGROUND KNOWLEDGE IN CROSS-CULTURAL COMMUNICATION: AN ANALYSIS OF SAMPLE JAPANESE AND AMERICAN BUSINESS CONVERSATIONS by Professor Stephen Ryan



This paper considers how culture-specific background knowledge can affect cross-cultural communication in a business context between Japanese and Americans. Americans and Japanese have a unique set of cultural values and norms that go unrecognized in conversation often resulting in misunderstandings or negative first impressions which then affect future relationships. Sample cross-cultural conversations from business meetings along with data collected from Japanese and American respondents are compared and analyzed highlighting culture-specific background knowledge. This work underscores the importance of, first, becoming more mindful of how our own culture affects how we communicate and, second, becoming more open to how people from other cultures prefer to communicate.

Presented by Professor Stephen Ryan

Associate Professor of Intercultural Communication, Yamagata University

3:00-3:15pm Coffee Break

3:15-4:45pm

Session 3: Information Technology

Chaired by Dr. Miron Wolnicki, Villanova University

PROJECT BREAKDOWN: PATTERNS OF FAILURE IN APPLICATION SOFTWARE IMPLEMENTATION* by Dr. James J. Taylor



This paper seeks to identify patterns that bring about failure in major application software implementations. The literature on such failures is reviewed to identify a common set of expected explanations for the failures. A group of fifty real world application software implementation projects are then reviewed. Of these, six may be called failures. A brief case study of each failure is presented and explanations for the failure are identified. The explanations for these real world failures are then formally compared to the explanations identified in the literature and similarities and differences are noted. For this data set, there were differences between the expected set of explanations and the actual explanations identified. Most specifically, forms of technological failure were more common than expected from the study of the literature. For this version of the paper, the author introduced the concept

of project escalation as an additional kind of project failure. The concept of escalation in project scope and cost was introduced to project management in the mid 1990's and became formalized as a separate kind of failure early in 2000.

Presented by Dr. James J. Taylor

Associate Professor of Finance, University of Guam's School of Business and Public Administration

LEARNER-CENTERED BUSINESS TRAINING FOR MULTICULTURAL ENVIRONMENT* by Dr. Wai K. Law



Following the expansion of the global economy, students of diverse cultural backgrounds bring different learning styles into the learning environment. The multi-cultural context creates new challenges to accommodate drastic difference in perspectives on time management, group interaction, learning motivation, and learning approaches. Emerging pedagogical challenges include training students to collaborate, to discover, and to solve problems through critical thinking. Engaging students in activity-based and problem-based learning provides powerful positive pedagogical tools to prepare students with adaptive learning skills for dynamic business environments. This presentation reports lessons with the application of learner-centered instructional methods.

Presented by Dr. Wai K. Law

Professor of Business Strategy & Information Systems, University of Guam's School of Business and Public Administration

USING COOPERATIVE LEARNING PROCESS TO ENHANCE STUDENT LEARNING EFFECTIVENESS: AN EXPERIMENTAL STUDY WITH COMPUTER TECHNOLOGY by Dr. Yousou Joseph Zou and Dr. Yukiko Inoue



In order to improve student learning effectiveness, an experiment was designed to practice the cooperative learning method in a computer science course teaching at University of Guam, summer 2006. The teaching course was CS 200 Computer Applications and Labs. The learning objective for students is to design and develop a multimedia web-page. There were two session classes with different student group at each session but taught by same instructor and use the same teaching materials. In one session class, students are divided into four learning groups (experimental class); In other session class, there were no group learning is assigned (control class). The learning results for both experimental and control classes were assessed with handson exam and software quality testing. The score of the two the sessions are compared and analyzed. It found that the student learning results for the cooperative learning groups are

obviously better than the students in the control class.

Presented by Dr. Yousou Joseph Zou

Associate Professor of Computer Science, University of Guam's College of Natural and Applied Sciences

ASSESSING INFORMATION SYSTEMS SECURITY WITHIN LOCAL GOVERNMENTS: A PILOT STUDY FOR CENTRAL PENNSYLVANIA* by Professor Charlotte Eudy McConn, Jungwoo Ryoo and Tulay Girard



Information systems security is critical for all organizations since security threats have become such a constant and pervasive force. Preliminary research by the authors indicates that while significant scholarly efforts have been made at the federal government level, little research has been conducted to assess the information systems security readiness of small local governments in the United States. Therefore, it is of great importance to properly assess the status quo of information systems security practices in this setting. This paper presents the results of a pilot study that evaluates the information systems security readiness of small local governments located in central Pennsylvania. The authors have studied three representative local governments in the region. The study serves as a first step in building a local government-specific assessment framework for a follow-up study that will use a more refined and advanced measurement model.

Presented by Professor Charlotte Eudy McConn

Instructor of Information Systems, Pennsylvania State University-Altoona's Division of Business and Engineering

4:45-5:00pm Open Forum

Day 2, March 6, 2007

9:30-10:45am

Session 4: Accounting and Finance

Chaired by Dr. Maria Claret Mapalad-Ruane, Alfred University

APPLYING A VALUE-ADDED PRODUCTIVITY INDEX IN AN INTERNATIONAL CORPORATE ENVIRONMENT: AN OVERVIEW OF HOW KYOCERA CORPORATION USES HOURLY EFFICIENCY TO IMPROVE COMPANY PROFITS* by Professor Jay Andrew Smith



How can a company use an accounting tool to help drive profitability? According to one of Japan's most respected entrepreneurs, Kazuo Inamori, founder of the 60,000+ employee-strong technology firm Kyocera, as well as the major Japanese telecom firm DDI (now KDDI), and also the Kyoto Prizes, "The most important mission of corporate accounting is to support the corporation's profitability." Kyocera Corporation and its unique, home-grown "Amoeba Management" system are introduced. In particular the key productivity index measurement, "Hourly Efficiency," is explained and how it is used to improve profitability as well as its application outside Kyocera and Japan are discussed.

Presented by Professor Jay Andrew Smith

Associate Professor, Inamori Academy of Technology and Management, Kagoshima University

THE REAL TIME ORGANIZATION: ONLINE BUDGET AND FINANCIAL APPLICATIONS AND MANAGEMENT CHANGE* by Dr. James J. Taylor



Over the last thirty years businesses and other major organizations have been implementing computer based online, real time financial applications. These applications radically reduce the time with which detailed and summary information is available while they also radically increase the range of places that information is available. This study presents an investigation into how organizational management evolves when such applications are implemented. The study is based on extended interviews with fourteen chief business officers of different educational institutions that have each successfully implemented such an application. Over a period of years, chief business officers have actively utilized the functionality available in online, real time applications to more widely share institutional responsibility for financial accountability and fiscal integrity. Based on the findings of this study, those auditing

organizations utilizing this kind of application would expect to find in these organizations a greater sharing of overall managerial responsibility. This qualitative, grounded theory study also utilizes the functionality of the WEB to provide interested readers direct contact with the data underlying the study. This approach provides an additional way of enhancing the credibility of qualitative studies. Interested readers may find out more about the study at http://www.online-realtime.org.

Presented by Dr. James J. Taylor

Associate Professor of Finance, University of Guam's School of Business and Public Administration

THE IMPACT OF CHINA'S ADMISSION TO THE WTO ON THE INTERNATIONAL EQUITY MARKETS* by Dr. David Krause and Dr. George Kutner



International equity diversification has been fundamental to portfolio management, but reportedly the benefits have diminished. Emerging and developed country equity markets have tracked more closely with the U.S. markets since the 1997 Asian financial crisis; however, this study suggests that the trend changed significantly following China's admission to the World Trade Organization. Using monthly return data covering the period from July 1997 through 2005, we found decreasing correlations between Asia-Pacific markets and those in the U.S. and Europe after December 2001. We also we observed significantly higher equity returns for Asian-Pacific equity markets since China entered the WTO.

Presented by Dr. George Kutner

Professor of Finance, Department of Finance, Marquette University

11:00am-12:40pm

Session 5: Strategic Management

Chaired by Dr. James J. Taylor, University of Guam

THE INFLUENCE OF ENVIRONMENTAL TURBULENCE ON THE STRATEGY-PERFORMANCE RELATIONSHIP AMONG NEW VENTURE START-UPS: THE HIGH-TECH AND BIOTECH INDUSTRY* by Dr. Annette Taijeron Santos



environments that were stable.

This study examines the influence of environmental turbulence on the strategy-performance relationship among first movers and second movers in the high tech and biotech industry in the United States. The data for this study were collected primarily through an online survey as well as mailed out surveys to top executives of high tech and biotech new venture companies in the United States.

This study found significant differences between first movers and second movers in the high tech and biotech industry in regards to the type of strategy process employed and level of environmental turbulence. Specifically, first movers employed a mixed strategic process, whereas, second movers employed a formal strategic process. In addition, first movers reported they operated in moderate environments, whereas, second movers reported operating in

Presented by Dr. Annette Taijeron Santos

Assistant Professor of Management, University of Guam's School of Business and Public Administration

EFFECTS OF NATIONAL CULTURE ON TECHNOLOGICAL INNOVATION* by Dr. Ning Li



The capacity of technological innovation is critical to the competitiveness of modern corporations and, thus, is of primary concern of business leaders around the world. However, there is a great variation in the degree of success different countries have in innovating different technologies. This paper provides a conceptual framework of cultural explanation for the cross-national variation in innovative capacity in different sectors. Previous studies in technological innovation, culture, and economic performance are reviewed. Several cultural characteristics that appear important to technological innovation are defined and linked to different patterns of behavior across nations. Cultural traditions and their impact on innovation styles in the USA, Japan, and China are analyzed. Implications for strategic management in enterprises under different national culture environments are also discussed.

Presented by Dr. Ning Li

Assistant Professor of Public Administration, University of Guam's School of Business and Public Administration

NURTURING LEADERS: KEY STEPS TO LEADERSHIP DEVELOPMENT by Professor Kenichiro Oku



Based in the philosophies of Tempu Nakamura (1876-1968), this presentation discusses the need for leadership in Japan and elsewhere, defines key activities of leading, and then focuses on four steps in nurturing leadership. These processes are Endurance, Absorption, Creation, and Character. Endurance helps move from "succeeding" to "success" through the accumulation of attained smaller goals. Absorption means a "no excuses" focus on process where the next step is always seriously considered and motivation of the group is engendered by providing discretion in decision making. Creation is a process of imagination and inspiration through which "desire" is changed to "belief" and confidence developed. Character is developed in a self-fulfilling way through working toward a goal.

Presented by Professor Kenichiro Oku

Chair of the Management Philosophy Department, Kagoshima University's Inamori Academy of Management and Technology

HUMAN RESOURCE MANAGEMENT PRACTICES OF U.S SUBSIDIARIES IN TAIWAN: A COMPARATIVE STUDY WITH LOCAL TAIWANESE FIRMS* by Dr. Daniel Sauers, Dr. Steven C.H. Lin, Dr. Jeffrey C. Kennedy, and Dr. Hamid Yeganeh



In this study, we compare the human resource management (HRM) practices of U.S subsidiaries in Taiwan to those of their parent firms and to those of large Taiwanese companies in an effort to understand how foreign subsidiaries adjust to the competing demands for global integration and local responsiveness. The results indicate that HRM is not a monolithic function, but consists of practices that differ in their relative resemblance to local practices and to parent practices. This suggests that the competing demands for global integration and local adaptation should not be viewed as opposite ends of a single continuum, but as two independent variables. Placing these demands on opposite axes, we propose a global integration-local adaptation matrix with four basic combinations of HRM practices: universal, global, unique and local. This matrix recognizes the realities of a global economy where success may require

balancing the competing demands for global integration and local adaptation resulting in HRM practices in subsidiaries that are unique both to the parent firm and to the local environment. It also recognizes the internationalization of management resulting in universal HRM practices emerging.

Presented by Dr. Daniel A. Sauers

Professor of Management, Winona State University's Business Administration Department

GLOBAL AWARENESS PROFILES OF FUTURE BUSINESS PROFESSIONALS: A COMPARISON OF INTERNATIONAL BUSINESS STUDENTS IN U.S. AND CHINA* by Dr. Maria Claret Mapalad-Ruane, Professor Frank Duserick and Ms. Kalyn Follmer



This paper is a study of the global awareness of business school students who will become the business professionals in the future and to see if there is a cultural difference in the global awareness between U.S. and Chinese business school students. A two-part survey provided the basis for this study. The first part is J. Nathan Corbitt's Global Awareness Profile Test ("GAP Test"), which consists of 120-multiple choice questions in the broad context areas of Environment, Politics, Geography, Religion, Socioeconomics, and Culture, and on the regional geographic areas of Asia, Africa, North America, South America, the Middle East, and Europe, plus general global questions. The second part is based on a geography test ("MAP test") whereby respondents were asked to identify a number of countries from maps of Europe, South America, Asia and Africa. Respondents were two groups of future business professionals:

Business students in a university in the U.S. and in a university in China.

Presented by Ms. Kalvn Follmer

Sophomore student of Business Administration-International Business, Alfred University's College of Business

12:40-1:40pm Lunch

Session 6: Economics

Chaired by Dr. Maria Claret Mapalad-Ruane, Alfred University

ACCESS, AFFORDABILITY, PREVENTION: REPORT OF FINDINGS AND OPTIONS FOR GUAM'S UNINSURED* by Dr. Roseann M. Jones



Data from the 2005 Guam Household Income and Expense Survey (HIES) showed that the number of individuals and families without health insurance exceeded rates found in the United States. Guam's business leaders, public agencies, health providers, legislators, and the uninsured participated in separate focus group sessions in the Fall/Winter of 2005 to uncover possible reasons for Guam's higher than average rates of uninsured. In February 2006 a Health Summit brought each of these groups together to frame a shared idea of how best to provide a system of health care to alleviate Guam's growing numbers of uninsured. This paper presents major findings and considers possible options for health insurance coverage, which offers greater access, affordability, and prevention.

Presented by Dr. Roseann M. Jones

Associate Professor of Economics and Public Policy, University of Guam's School of Business and Public Administration

ECONOMIC AND POLITICAL ENVIRONMENTS AND THEIR EFFECTS ON FOREIGN DIRECT INVESTMENTS* by Dr. Maria Claret Mapalad-Ruane and Mr. Jason C. Weeks



This paper is a study of economic and political factors that affect foreign direct investments. The importance of these factors to international businesses and international managers' decision to operate in foreign markets has given rise to a number of statistics that attempt to measure different aspects of the business environment, including those being studied in this paper. We use regression analysis to study the determinants of foreign direct investment. In our analysis, alternative models, each using different measures of economic and political factors, will be estimated in order to test the robustness of our (and previous) empirical results to the choice of proxies for economic and political factors used in the estimation.

Presented by Mr. Jason Weeks

Graduating Senior Student of Economics and Marketing, Alfred University's College of Business

2:30-3:00pm

Session 7: A Student Presentation

Chaired by Dr. Roseann M. Jones, University of Guam

SPECIAL TOPICS ON THE MACROECONOMY OF MICRONESIA



Economies of the Pacific Islands have entered the twenty-first century ready to capitalize on past investments in education, social welfare, health, transportation, and commerce. Yet, the development agenda for this region is far from complete. While much has been done to improve the islands' social and capital infrastructures, these investments have been focused, appropriately, at meeting local needs. Meeting local needs remains part of the regional development agenda into the twenty-first century. As individual economies, the islands of the Western Pacific need to sustain prior investments and continue progress toward prosperity.

Presented by Mr. Julian Janssen

Senior student of Political Science and teaching assistant of Economics, University of Guam

3:00-3:15pm Coffee Break

Session 8: Presentation of Student Research and a Student Presentation

Chaired by Dr. Barbara Wiens-Tuers, Penn-State Altoona

Student Research Presented by Dr. Yousou Joseph Zou, University of Guam

THE INFLUENCE OF TOURISM INDUSTRY ON THE DEMAND OF AGRICULTURAL PRODUCTS IN GUAM -A QUANTITATIVE STUDY USING A NEWLY DEVELOPED SOFTWARE by C. Farnum, A. Blas, M. Helgenberger, Y. J. Zou & B. Barber

Using the Guam visiting tourists' data in 1993 – 2002 and the Guam imported agricultural products from various countries and areas during 1999 – 2002, a newly designed software has been developed to study the influence of Guam's tourism industry on the agricultural product demand in the island. A linear mathematical formula has been found finally in this research. This paper will show how the software to be used and the findings of our research

A COMPUTER SOFTWARE THAT ANALYZING THE CHARACTERISTICS OF GUAM TOURISM INDUSTRY DURING 1994 – 2002 by L. A. Manalang, V. Abiera, E. Quichocho, Y. J. Zou, and J. C. Salas

In this senior research project, we developed a software to analyze the monthly characteristics of Guam visitor's data in 1994 – 2002. The Guam visitor's data were obtained from Guam Visitor's Bureau with the help of Dr. John Salas. The Software was developed following the U.S. national standard and the international standard. The mathematics and algorithms were used to process the input data and to find a quantitative formula that best describes the tendency of Guam tourism in 1994 -2002, we hope this research outcomes can be used to predict and guide the future development of Guam's tourism industry. This paper reports our research outcomes in software development and the data processing.

DATA ANALYSIS SOFTWARE AND THE HUMIDITY-RAINFALL RELATIONS OF GUAM by P. V. Rabino, G. Ocampo, R. Ada, Y. J. Zou & P. Singh

In this research, we attempt to use our self-developed weather data analysis software to process Guam's humidity and rainfall data and to find the quantitative relationship between humidity and rainfall.

The meteorological data used in this research were collected from 1999 to 2004 at Guam's Yigo and Inarajan weather stations by Agricultural Engineering Research Group of the College of Natural and Applied Sciences, University of Guam. The software to process and analysis of meteorological data was developed in the undergraduate research project of CS431 Advanced Topics in Software Engineering. The course was offered in fall 2006 and instructed by Dr. Y. Joseph Zou

Based on the mathematics for curve-fitting, we have developed the data-analysis algorithms and software written in C++ language that has successfully generated the mathematical formula which best describes the relationship between humidity and rainfall in Guam.

PREDICTION OF GUAM TEMPERATURE BY A SELF-DEVELOPED SOFTWARE by Umayam, D. Sablan, R. Itugot & Y. J. Zou

Using Meteorological (temperature) data in 1999 – 2004 that were recorded at Yigo Weather Station and Inarajan Weather Station of College of Natural and Applied Sciences, University Guam, a self-developed software generates a quantitative mathematical relationship of Guam temperature change with time, day and year. The mathematical formula generated by the software can be used to predict the temperature variation with specific time period. The software is also designed as a temperature data bank from which one can access temperature data at any time, day, month and year in 1999-2004. The software is also able to predict the averaged temperature over a period of time, a day, a month or a year. This presentation will show how the software are designed and developed, how to use the software, and the outcomes of the temperature prediction.

ANALYSIS OF GUAM WORKFORCE DATA BASED ON SELF-DEVELOPED SOFTWARE by R. A. Yolangco, A. Tesalona, Y. J. Zou & A. B. Enriquez

This paper reports our research results in the undergraduate research project of CS431 Advanced Topics in Software Engineering. The course was offered in fall 2006 and instructed by Dr. Y. Joseph Zou.

The research project requires us to develop computer software with the national software development standard to analyze the 63 sets of survey data on Guam workforce to tell workforce demand and skills need in Guam. The datasets were surveyed and collected in 2004 and in 2006 by Pacific Center for Economic Initiatives of University of Guam from 63 business companies in Guam. The workforce datasets were provided to us through Dr. Anita B. Enriquez.

Therefore in this presentation we will show how our software works and the partial outcomes of data analysis produced by our self-developed software.

A STUDY OF THE DISTRIBUTION OF MINERAL ELEMENTS IN GUAM VIA SOFTWARE by E. Del Rosario, B. Biacan, Y. J. Zou & Chris Evola



This research is quite helpful in assessing the different mineral elements in the soils and waters in Guam. The software we developed in this research is used to find the correlations of the minerals in specific areas of the island and their concentrations in ppm. The software sorts out all the measured data from north to south of Guam island for easy reference and usage. The software tool using advanced mathematics and computer algorithms in it provides information that may be useful for those seeking to do research in the fields of agriculture, disease control, earth science and etc.

Presented by Mr. Erwin Del Rosario

Student of Natural and Applied Sciences, University of Guam

3:45-4:15pm

Session 9: Pedagogy

Chaired by Dr. Barbara Wiens-Tuers, Penn State-Altoona

PEER MENTORING IN INTRODUCTORY ECONOMICS: THE COSTS AND BENEFITS OF SUPPLEMENTAL INSTRUCTION by Dr. Barbara Wiens-Tuers and Professor Paula Ford



Supplemental Instruction is a an embedded peer tutoring program developed at University of Missouri, Kansas City. It is targeted at classes where attrition rates tend to be highest and students may have difficulty successfully completing the course. This paper is a case study of two large classes in introductory macroeconomics where the Supplemental Instruction program was implemented. Data collectedshow a statistically significant decrease in the percentage of students with unsuccessful course outcomes (grades less than 'C' or dropping the class) and a statistically significant increase in the class GPA from prior semesters without Supplemental Instruction (SI).

Presented by Dr. Barbara Wiens-Tuers

Associate Professor of Economics, Pennsylvania State University-Altoona's Division of Business and Engineering

HIGH SCHOOL ECONOMICS: MEASURING THE GAP BETWEEN WHAT IS BEING TAUGHT VS. WHAT SHOULD BE TAUGHT* by Dr. Maria Claret Mapalad-Ruane



This paper is a study that aims to assess U.S. students' overall experience in the study of economics in high school. Within this line of inquiry, questions aimed at finding out how prepared high school graduates are for the study of college-level economics, or equivalently, what economics topics they were taught in high school, become relevant. In addition to assessing students' level of preparation, it is hoped that the survey will shed light on the question of students' level of interest in studying economics in college and what role their overall experience in their study of economics in high school plays in shaping their further interest in the economics. To answer these questions, a three-part survey was designed and administered. This study reports and analyzes the results of this survey, and uses them to

design future research on this and related topics.

Presented by Dr. Maria Claret Mapalad-Ruane

Associate Professor of Economics, Alfred University's College of Business

4:15-4:30pm Open Forum and Closing Session

University of Guam presents Certificates of Appreciation to conference co-chairs.



In above photo from left to right: Dr. Ning Li, Dr. Anita Borja-Enriquez, Dr. Barbara Wiens-Tuers, Dr. James J. Taylor, Dr. Maria Claret Mapalad-Ruane, Dr. Roseann Jones, Dr. Filomena Cantoria, Dr. Yukiko Inoue.

Co-Chair Dr. Maria Claret Mapalad-Ruane (right) presents gifts to Dr. Anita Borja-Enriquez (left) of the University of Guam and to Dr. Barbara Wiens-Tuers (center) of Penn State-Altoona. The gift is a combination of glass and ceramic artwork by Alfred University Graduating Senior Art & Design students Mr. David Ashley (glass artwork) and Ms. Carin Sankus (ceramic artwork).

