Innovative Program Development in Agriculture Through Distance Education in the Insular Areas

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Presented by
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CariPac Members

- University of the Virgin Islands
- University of Puerto Rico – Mayaguez
- University of Guam
- Palau Community College
- American Samoa Community College
- College of the Marshall Islands
- College of Micronesia - FSM
Challenges of Insular Institutions

- Limited access to faculty,
- Brain drain,
- Remoteness,
- High transportation costs,
- A limited technology infrastructure,
- High technology cost, and
- Unstable utilities
How are CariPac members benefiting from collaboration?

– Increased Student recruitment and retention
– Improved learning environments
– Improved technology resources
– Faculty development opportunities
– Curriculum development for distance education
– Ability to deliver distance education courses
Distance Education

• Challenges
  – Limited bandwidth
  – Access to faculty
  – Curriculum

• Opportunities
  – [http://agricultura.uprm.edu/caripac/partners.html](http://agricultura.uprm.edu/caripac/partners.html)
  – Entire course vs. supplemental material
  – Video conference
  – Instructional videos
  – Faculty development /student modules
CariPac Website

CariPac Partners

University of Puerto Rico

Priority Areas: Global Food Security and Hunger
Educational Need Areas: (5) Student Experiential Learning
Key Disciplines: Horticulture, Crop Protection, Agricultural Economics and Agribusiness, Soil Sciences, Agricultural Mechanization Technology

University of Guam

Priority Areas: Global Food Security and Hunger
Educational Need Areas: (3) Instruction Delivery Systems; (5) Student Experiential Learning; and (6) Student Recruitment, Retention, and Educational Equity
Key Disciplines: Horticulture; Nutritional Epidemiology, Public Health and Nutrition, and Plant Nutrition
Video Conferencing Tutorial for Students
Impacts

• Increased student recruitment and retention
  – American Samoa Community College
    • maintain ACNR completion rates at 90% or better thereby increasing the number of ACNR graduates,
  – College of Micronesia – FSM
    • Increased enrollment from 9 to more than 100 students
    • Retention rates at 95%
  – College of the Marshall Islands
    • 90% of full time students were enrolled in STEM courses
  – Palau Community College
    • 100% of Ag Science students completed program requirements for graduation
• Improved learning environments
  – College of the Marshall Islands
    • Equipped two classrooms with video conferencing equipment
  – University of Puerto Rico
    • Enhanced three classrooms for distance education delivery
  – University of the Virgin Islands
    • Improved and upgraded equipment in smart classrooms and video conference rooms
  – University of Guam
    • Updating hardware and software in classroom facilities
• Improved technology resources
  – Satellite access
  – College of Micronesia-FSM
    • Improvements to fiber optic connections
  – University of the Virgin Islands
    • T1 lines to support the delivery of video conference courses
• Faculty development opportunities
  – University of Puerto Rico
    • Training provided to faculty members in DE technologies
  – University of the Virgin Islands
    • Blackboard certified trainer for faculty development as well as training for faculty to develop online courses
  – University of Guam
    • Faculty have begun reformatting courses for the online and hybrid environment
• Curriculum development for distance education
  – University of Guam
    • AG102 (Intro to Plant Science) course developed for online delivery
    • AG321 (Horticulture Plant ID) has been reinvented as a hybrid course
  – University of Puerto Rico
    • Developed a DVD for courses in Human Nutrition and Food Safety to share with other CariPac members
  – College of Micronesia-FSM
    • Began certificate program on Pohnpei
Conclusions

• Collaboration
• Innovative teaching strategies
  – rejuvenated agriculture industry
  – Retention of local
• Continued dialog with colleagues