Educational Needs for Application of Climate Information

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Educational Needs (1)

- What is the status of current education for undergrad/grad/K-12 related to climate, agr. & nat. resources? Gaps?
  - Missing the holistic course, that puts together the basic pieces of the whole climate change issues for undergraduates
  - Lack of climate change courses for graduate students (need theory/technical for them)
  - Policy/applied courses vs (mechanism/theory)?
  - Cross-training or “good citizen” science courses
  - Can we stay out of the “politics” of climate and still discuss policy?
Educational Needs (2)

• How do we prepare students for climate-related issues with conseq to agr & nat resources?
  – Some have emphasis on phys & quant (FSU)
  – Resistance to changing courses (can faculty and admin adjust and implement?)

• Students are finding jobs in areas closer to climate and policy (NGOs, companies)
  – More climate science PhDs than jobs?
  – Columbia Univ MS program for climate/society
  – Climate modelers need physics/math. Too much fluff.
Educational Needs (3)

• Need to create collaborations for teaching courses across universities in era of distance education
  – Example: UF student taking a course from FSU?
  – Major barriers: Credit to faculty for teaching outside of his university. Or student getting credit for course taken outside. Resources for curriculum development.
  – UF’s Interdisciplinary Major students: Departments dislike, don’t count for “departmental” credit.

• Need to work with university presidents & provosts & chairs to share/give credit/facilitate.
Educational Needs (4)

• What new areas (jobs) should we be training students for? What courses needed?
  – AMS meterologists need some climate background
  – Economics/industry
  – Risk/insurance/actuarial

• How should climate change education programs balance issues related to local/regional impacts versus global impacts, especially differential effect on industrial vs developing countries
  – Yes, cover both. Students need math/biol toolkit
  – Climate signals are world-wide, prices of oil/food
  – Students want both, some international & some local. Engage with local service/learning course with city/district/industry.
Educational Needs (5)

• Examples of successful educational programs that can be models to guide new programs
  – Service/learning course with city/district: water supplies and sustainability (USF/Clearwater)
  – Climate change course for undergrad (FSU)
  – Columbia Univ MS program for climate/society