“Science-PeTS” for Learning About Biodiversity

Julianne A. Wenner
Department of Mathematics and Science Education
&
Kathrin Stanger-Hall
Department of Plant Biology

Science PeTS
Personal Teaching Species
a project for learning biodiversity
Background

- Class: Two sections of BIOL 1108 (~300 students per section)

- Course content: History of life, evolution, structure and function, ecology
How would you teach biodiversity to a lecture hall of 300 students??
Our Solution: Science PeTS

(P)ersonal (T)eaching (S)pecies

- Learning objectives:
  - Work with primary literature
  - Extract and present key information on a given species
  - Publish information on a species webpage
  - Review and evaluate given information on a species
  - Describe possible community-level relationships and identify role(s) of a given species

Science PeTS
The species list is comprised of 25 pairs of species that have relationships with each other.

Students will choose a species from the list we have created.

Students will work in groups of six (~50 groups per section).
Science PeTS Implementation

- Students will complete an exercise on how to evaluate online resources
- Students will research the required information for their species during the first half of the semester
- Content will be checked and posted to the website
During second half of semester, students will identify a partner species.

Students will evaluate their partner webpage and then describe the relationship on their own page.

There will be ‘bonus points’ available for students who find multiple relationships.
Assessment Measures

- Students will be assessed on their submitted species materials.
- We will administer pre- and post-tests concerning knowledge of biodiversity, attitudes towards biodiversity, and application of the project-specific research skills.
Future Plans

- Pilot testing in the summer
- First implementation in the fall of 2012
- Second implementation in the spring of 2013
None of this would be possible without the funding by the UGA STEM office! Thank you! 😊
Thank you!

Julianne Wenner → jakent@uga.edu

Kathrin Stanger-Hall → ksh@uga.edu

Questions?