Successful interactions with academia and watershed groups to meet agency needs.

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Outline

• Background
• Service learning in the biological sciences
• Matching students with opportunities
• Outreach
• Managing pitfalls
• Recommended practices
• Further research
Background

• The mission of higher education: **produce trained graduates**.

• To meet program goals, students are often asked to participate in experiential learning (internships) or service learning.

• Successful partnerships are grounded in the integration of agency needs, student outcomes, and program goals.
Service and Experiential Learning

• Service learning ties community needs to course structure - the course informs student service, and the service creates dialogue between the agency and the college. (Heffernan, 2001)

• Experiential learning provides students hands-on application of knowledge and skills learned in the classroom (Wurdinger and Carson, 2010)

• Both build competencies in problem solving, interpersonal communication, reflection, and KSAs for future employment.
Building partnerships with academia and watershed groups

• You have data collection needs and…
  • insufficient trained staff
  • Insufficient time to complete work
  • Insufficient funds

• Partnering with academia is a way to meet these needs and provide valuable on-the-job training for future environmental scientists

• Citizen scientists – including students– have contributed to data collection and verification across many different fields (Follett et al. 2015)
The match is essential

• Successful collaborations require consensus building between agency personnel and teaching faculty prior to involving students/citizen scientists.
• Agency personnel: Explicitly defined expectations and deliverables
• Faculty member: Clear course goals and objectives with measures in place that assess student performance
• Agency personnel and faculty member write up internship documents prior to initiating search for suitable students
• Arrange meeting/telecom with student to interview
Supporting agency needs

• Agencies have field sampling mandates and (usually) small budgets- hire an intern or service scholar to help you meet your goals.

• Local citizen scientists – particularly retirees from technical fields- have a lot to offer agency personnel in terms of life experience and finding solutions to complex problems.
Managing pitfalls with student workers

• Remember that the student is there to build competencies and KSAs.
• Regular communication between faculty member, field supervisor, and student is essential for successful results.
• Early assessment of student progress keeps students on track.
• Aim for highest workload at the beginning of the semester, tapering towards the middle, and end with writing before final exams.
Future research

• WVWC is undertaking a study to learn how agency personnel view undergraduate student internships.

• Results of the study will be presented at the 2017 AMAAB meeting as well as the Ecological Society of America meeting in Portland, OR.

• Please consider participating – everyone is welcome. The more the better!
References


Questions?