



Evaluation of the Effectiveness of Internships for Preparing Natural Resource Students

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- USU – UB
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Objectives

- Provide an objective measure of the change in abilities of students after they had served an internship
- Evaluate how students and natural resource managers viewed the program on a more subjective level
- Document programmatic outcomes
- Fine tune internship program

Background

- Program at USU-UB is about 15 years old
- ~ 50 students have completed program
- About \$1.5 million in funding
- Majority of funding is through Challenge Cost Share
- 100% of students who have completed program have career positions



Methods

- Reviewed the literature regarding the value of hands-on experiences for students
- Gathered the opinions of wildlife professionals regarding the qualifications for future employees
- Developed a skill set that described characteristics of successful natural resource managers
- Females vs males
- Academic experience – juniors vs seniors

Survey

Skill set survey for undergraduate students who completed an internship.

Please rate your skills on a scale of 1 (Low) to 10 (High) before and after participating in an undergraduate internship at Utah State University. A rating of 1 would indicate little or no ability and 10 would indicate complete comfort with your ability.

Are you - Male _____ Female _____

Before

After

Ability to work independently

Ability to apply materials learned in class

Ability to understand the role of planning

Ability to implement planning

Ability to make decisions

Ability to understand the management process

Ability to communicate via writing

Ability to communicate via speaking

Ability to solve problems

Ability to understand the role of science in management

Please use the back of this page to provide any comments you might have about your internship experience.

Results

- Small, non-random sample
- No differences in responses between females and males
- No differences between year when internship performed, junior vs senior
- Significant differences exist between before and after internship for all categories

Survey Results

Mean ratings by undergraduate students (n = 31) who completed a skill set questionnaire to describe their abilities before and after participating in an internship. The ratings ranged from 1 (Low) to 10 (High). A rating of 1 indicates little or no ability by a student and a 10 indicates complete comfort with their ability.

Ability	Before	After
Ability to work independently	5.9	9.3
Ability to apply materials learned in class	4.5	8.5
Ability to understand the role of planning	3.7	8.1
Ability to implement planning	3.5	7.0
Ability to make decisions	3.4	6.9
Ability to understand the management process	4.0	7.7
Ability to communicate via writing	4.2	7.0
Ability to communicate via speaking	4.2	8.3
Ability to solve problems	3.6	7.7
Ability to understand the role of science in management	4.3	8.7

What Did Agency Biologists Have To Say?

- When we hire these interns for career positions we know that they are prepared to hit the ground running.
- They have the ability to ask the right questions.
- The internship has certainly given them a leg-up for becoming a career hire with us.
- The experience and exposure that the interns have make them successful from day one.

What Did The Students Have To Say?

- This internship changed my life. I was able to explore a wildlife career while I was still in school.
- I owe my job as a biologist with the BLM to my internship. The relationships I built with the people working there helped me to get the job.
- Before I worked on the internship, I did not have a clue how everything was connected.
- Dr. E was right, working with people can be as important as working with wildlife and habitat.
- I had the chance to learn from my mistakes and to apply what I learned in class.

Student Accomplishments

- 100% have careers in NR
- Students have presented
- Students have published
- Students have earned awards



Conclusions

- The internship program at USU-UB has had a very positive impact on the students who have completed it.
- Student abilities increased dramatically for all characteristics considered important.
- A large measure of the success of the program stems from the close relationship between the natural resource management agencies and USU-UB.

Conclusions

- Another key to student success is the large amount of structure in the program.
- Students compete to serve an internship. This involves excelling at classwork and also by volunteering.

Questions?

