TRAINING STUDENTS TO ATTEND A CONFERENCE: SOCIAL AND CAREER OUTCOMES

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Undergraduate Students and Career Exploration

Undergraduate students need more opportunities to:

- Gain awareness of career opportunities
- Explore professional community
- Develop career skills

Not provided in most courses
Preparing students for the workforce

- Professional behavior
- Working in teams
- Developing professional relationships
- Professional and ethical responsibilities
- Communicating science
- Knowledge of current issues

Photo courtesy of Mike Jenkins
Professional benefits of REUs

- Improved understanding of professional practice
- Developing identity as scientist
- Cultivating professional relationships
- Evaluating career opportunities

Challenges of REUs

- Few positions available
- Highly competitive
- Benefits higher achieving students
- Lower diversity of participants

How do we provide more opportunities for students to gain social and career benefits similar to the REUs? Conferences!
Course Objectives

- Formalize attendance of national meeting
- Train/mentor students to attend conference
- Support students in development of career goals
- Provide opportunity to develop informal communication skills.
- Explore career options and opportunities in our field
Course Format

- Pre-Conference Meetings
  - Pre-Survey
  - Discussion Topics
  - Assignments

- In-Conference Meetings
  - Assignments
  - Discussion
  - Guest Speakers/Mixed Institution Groups

- Post-Conference Meetings
  - Reflection
  - Post Survey
Course Format

- **Pre-Conference Meetings**
  - Pre-Survey
  - Discussion topics
  - Assignments

- **In-Conference Meetings**
  - Assignments
  - Discussion
  - Guest speakers/Mixed Institution Groups

- **Post-Conference Meetings**
  - Reflection
  - Post-Survey

- Create a personal schedule (conference app)
- Evaluate 3 conference abstracts
- Develop resume
- ID potential employers
- Summarize literature
Course Format

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- Post-Conference Meetings
  - Reflection
  - Post-Survey
<table>
<thead>
<tr>
<th>Task</th>
<th>Description of Event</th>
<th>Time/Date</th>
<th>Signature of Witness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meet another undergrad member from a different institution</td>
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<tr>
<td>Meet a grad student from a difference institution</td>
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<td>Meet a nonacademic professional</td>
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<td>Meet a professor from another institution</td>
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<td>Ask a question of someone at a general research poster</td>
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<td>Ask a question of a student at a research in progress poster</td>
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<td>Ask a question at the end of a talk</td>
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<td>Meet alumni at the alumni social</td>
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<td>Attend another activity (vendors, panel discussion, plenary session, non-Purdue social, etc.)</td>
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<tr>
<td>Attend a working group meeting</td>
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</table>
Course Format

- **Pre-Conference Meetings**
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**Post-Conference Meetings**

- Reflection
- Post-Survey
### Data Collection

<table>
<thead>
<tr>
<th>I am planning to pursue a career in ...</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Somewhat Agree</th>
<th>Neutral</th>
<th>Somewhat Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</table>

| I would like to work for ...           |               |       |                |         |                   | ✔️       |                   |
|                                       |               |       |                |         |                   |          |                   |

| Grad school is important for career prep in ... | ✔️ |       |                |         |                   |          |                   |
|                                               | ✔️ |       |                |         |                   |          |                   |

| Experience is important for career ...     |       | ✔️     |                |         |                   |          |                   |
|                                           |       | ✔️     |                |         |                   |          |                   |
## Data Collection

### Surveys
- Pre- and Post-conference surveys
- 6 Sections
  - Career goals
  - Preferred future employer
  - Perceptions of graduate school and career preparation
  - Perceptions of work experience and career preparation
  - Perceptions of graduate school and career advancement
  - Demographics and experience

### Video Recordings
Survey Results – Career Outcomes

I am planning on pursuing a career in wildlife.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Somewhat Agree</th>
<th>Neutral</th>
<th>Somewhat Disagree</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>89.2%</td>
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<td></td>
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<td>2.7%</td>
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<tr>
<td>Post</td>
<td>94.6%</td>
<td></td>
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<td>2.7%</td>
</tr>
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</table>

I am planning on going to graduate school at some point in the future.

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<tbody>
<tr>
<td>Pre</td>
<td>69.4%</td>
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<td></td>
<td></td>
<td>5.6%</td>
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<tr>
<td>Post</td>
<td>80.6%</td>
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<td>8.3%</td>
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</tbody>
</table>
Survey Results – Career Outcomes – I would like to work for...

1. **State or federal wildlife management agency.**
   - Pre: 81.1%
   - Post: 78.4%

2. **Non-governmental/non-profit conservation organization.**
   - Pre: 83.8%
   - Post: 70.3%

3. **Wildlife or natural resource consulting firm.**
   - Pre: 54.1%
   - Post: 54.1%

4. **College/university as a professor or teaching wildlife/science classes.**
   - Pre: 27.0%
   - Post: 32.4%

5. **Zoo, rehabilitation center, veterinary practice with captive wildlife.**
   - Pre: 62.2%
   - Post: 54.1%

6. **Science outreach or public education program.**
   - Pre: 59.5%
   - Post: 75.7%
Survey Results – Graduate school is an important part of preparation for a career in...

State or federal wildlife management agency.
- Pre 86.5%
- Post 97.3%
- %\ 8.1%
- %\ 2.7%

Non-governmental/non-profit conservation organization.
- Pre 64.9%
- Post 75.7%
- %\ 13.5%
- %\ 13.5%

Wildlife or natural resource consulting firm.
- Pre 89.2%
- Post 83.8%
- %\ 0%
- %\ 8.1%

College/university as a professor or teaching wildlife/science classes.
- Pre 97.3%
- Post 100%
- %\ 0%
- %\ 0%

Zoo, rehabilitation center, veterinary practice with captive wildlife.
- Pre 70.3%
- Post 81.1%
- %\ 21.6%
- %\ 13.5%

Science outreach or public education program.
- Pre 70.3%
- Post 59.5%
- %\ 13.5%
- %\ 29.7%
Survey Results – Previous experience as a wildlife technician is an important part of preparation for a career in...

- Surveys
  - Pre- and Post-conference surveys
    - 6 Sections
  - Career goals
  - Preferred future employer
  - Perceptions of graduate school and career preparation
  - Perceptions of work experience and career preparation
  - Perceptions of graduate school and career advancement

- Demographics and experience

- Video Recordings

- Reflection Essays

**State or federal wildlife management agency.**
- Pre 94.6%
- Post 100%
- 0%

**Non-governmental/non-profit conservation organization.**
- Pre 89.2%
- Post 91.9%
- 5.4%
- 2.7%

**Wildlife or natural resource consulting firm.**
- Pre 86.5%
- Post 89.2%
- 0%
- 5.5%

**College/university as a professor or teaching wildlife/science classes.**
- Pre 81.1%
- Post 94.6%
- 0%
- 0%

**Zoo, rehabilitation center, veterinary practice with captive wildlife.**
- Pre 89.2%
- Post 91.9%
- 8.1%
- 2.7%

**Science outreach or public education program.**
- Pre 83.8%
- Post 86.5%
- 10.8%
- 5.4%
Survey Results – Graduate school is critical for career advancement in...

<table>
<thead>
<tr>
<th>Category</th>
<th>Pre</th>
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<th>Strongly Agree</th>
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Social Cognitive Career Theory Categorizations

- (Lent et al. 2002)
- Self-efficacy beliefs
- Vocational interest development
- Outcome expectations
Video Analysis Results

Self Efficacy

- Self-confidence in completing assignments
- Interacting with others often “scary” or “nervous”
- Asking questions
- Sense of belonging
- Critiquing presentations
- Feeling “lost” or “overwhelmed”

Photo courtesy of The Wildlife Society

COLLEGE OF AGRICULTURE – FORESTRY AND NATURAL RESOURCES
Video Analysis Results

Vocational and career interest development

- Engaged in profession
- Applied course content to the experience
- Improved understanding of the nature of work in their field
- Emphasis on graduate education decreased interest in some fields
- New interests developed
Video Analysis Results

Outcome Expectations

- Increased understanding of how to pursue specific careers
- Job application information (résumés, etc.)
- Increased understanding of career opportunities
- Clarified perceptions of job expectations
- Importance of graduate school
- Importance of experience
- Learned how to network to meet future advisors or supervisors

Photo courtesy of Darren Wood
Student Outcomes - Social

- Exposure to social and cultural norms of their field
- Social integration and sense of identity and belonging
- Built confidence when networking and during professional socializing
- Built bonds with faculty, peers from home institution
  - Retention
  - Confidence
  - Success
- Social goals should also be built into REUs
Student Outcomes - Career

- Increased strength of interest to attend graduate school
- Clarified and confirmed graduate school intentions
- Understanding of professional practice
- Understanding of career advancement – understand steps necessary to meet goals
Benefits to offering this course

- Benefits of the structure and environment of the classroom
- Daily meetings provided supportive environment
  - "Safe" environment for practicing professional social skills
- 120 credits/degree
- Less expensive than similar number of REUs

Photo courtesy of The Wildlife Society
Acknowledgements

- Purdue University
  - College of Agriculture
  - Student Organization Grant Authorization Board
  - Purdue Alumni Association
  - Department of Forestry and Natural Resources
  - Student Chapter of TWS
- University of North Carolina
  - Department of Environmental Sciences
- West Virginia University
  - Mary Grace Samuels Endowment
  - Division of Forestry and Natural Resources
- Guest Speakers
- The Wildlife Society
QUESTIONS?

For additional course information, please feel free to contact me at eflaher@purdue.edu.