2012-2013 Assessment Report
Program: Fish & Allied Aquacultures, PHD

College of Agriculture

School of Fisheries, Aquaculture, and Aquatic Sciences

Fish & Allied Aquacultures, PHD

Expected Outcome 1: Students should be able to communicate effectively within their area of expertise

Students are expected to be able to communicate their research effectively

Assessment Method 1: Exit seminar evaluation form

Assessment Method Description

All PhD students are required to present their research projects at the end of their PhD program to an audience that includes faculty, graduate and undergraduate students. Data presented here include PhD students who graduate in 2013. Faculty (that are not members of the student committee) evaluated the student presentations using a standard evaluation form. Students are judged based on the following criteria:

- Introduction/Hypothesis/Objectives
- Presentation of methods/Experimental design
- Presentation of results and conclusions
- Delivery
- Visual aids
- Overall clarity
- Fielding questions

Findings

A total of 3 students exit seminars were evaluated by faculty (between 4 to 9 faculty members returned evaluation forms). The overall results
showed that our PhD students were able to defend their research in an effective manner. However, a large difference in oral communication skills was found between native English speakers (n=2) and those who are not (n=1).

<table>
<thead>
<tr>
<th>Question</th>
<th>Native English Speakers</th>
<th>Non-native English speakers</th>
</tr>
</thead>
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<tr>
<td>Definition of research problem</td>
<td>9.25</td>
<td>7.5</td>
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<tr>
<td>Presentation of methods</td>
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<td>5.67</td>
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<tr>
<td>Presentation of results</td>
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<td>6.5</td>
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<td>Presentation of conclusions</td>
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<tr>
<td>Oral communication skills</td>
<td>9.50</td>
<td>7</td>
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<tr>
<td>Visual aids</td>
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<td>6.5</td>
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<tr>
<td>Overall delivery</td>
<td>9.50</td>
<td>6.5</td>
</tr>
<tr>
<td>Fielding questions</td>
<td>9.5</td>
<td>8</td>
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</tbody>
</table>

**How did you use findings for improvement?**

With the large number of graduate students currently enrolled in our program (over 50% of our PhD students are non-native English speakers) our findings revealed a significant issue in our program. Clearly, we need to improve the communication skills of our non-native English speakers. This issue will be brought up in a faculty meeting this semester for further discussion.

**Additional Comments**

**Expected Outcome 2: Students should be able to understand the scientific method**

Students are expected to understand the scientific method and apply it in their area of expertise

**Assessment Method 1:** Graduating graduate student survey, Office of Institutional Research and Assessment
Assessment Method Description

The Graduating graduate student survey was completed by students at the time of their application for graduation (2013-2014). Question number 8 (How many peer reviewed conference papers or posters (single or co-authored) did you present during the period of your graduate studies at Auburn University?) was used to assess if students were capable of applying the scientific method to their area of expertise.

Findings

Ninety two percent of our PhD graduates presented at least one peer-reviewed communication before graduation. Moreover, 50% presented 3 or more communications at scientific meetings, which suggests our PhD students were able to understand and applied the scientific method to their area of research.

How did you use findings for improvement?

We found a broad distribution of the number of peer-review communications from none to more than 10. Although we recognize our scientific disciplines are the diverse, these data could reflect a broad range in quality within our program with some faculty and their students being significantly more productive than others.

Additional Comments

Expected Outcome 3: Students should be able to write effectively within their area of specialization

PhD students are expected to publish their research in peer-reviewed journals. We expect our students to publish at least one peer-reviewed paper before they graduate.

Assessment Method 1: Input from the student's major professor

Assessment Method Description: the number of peer-reviewed publications accepted or published at the time of graduation will be counted base on provided CV.
Findings

Out 3 PhD students, only one had peer-reviewed publications before graduation. In fact, this student had a total of 6 accepted or in press publication in high impact factor journals. However, the other two students did not have their research work published (at least, not to date). This highlights a large diversity in quality and productivity among our PhD students.

How did you use findings for improvement?

With only one year of data it is difficult to establish any trends. We need more data to determine if the perceived difference in productivity is based on field (ie. aquaculture versus fisheries), ‘professor’ dependent or ‘student’ dependent.

Additional Comments