Expected Outcome 1: Students will be competitive for entry into workplace after graduation

Assessment Method 1: Analysis of student experience and placement

Assessment Method Description
We will conduct an exit survey and identify where they work after graduation

Exit Survey

Exit Survey for Graduate Students

Rationale: The Department conducts a comprehensive outcome assessment of the graduate program. The information collected allows the Department to examine critically its strengths and limitations and to facilitate improvement efforts in the program. Students are encouraged to be constructively critical of the program and to answer all the questions. The exit survey form is required for all graduating students.

Instructions: These questions will be administered online and questions will be customized based on their degree (MS or PhD). Follow-up interviews may be conducted by the Graduate Program Officer or the Department Head.

Name:
Student Banner Number:
Email address:
What was your highest degree prior to this MS or PhD degree?
Why did you pursue the MS or PhD degree?
After graduation, what is your employment plan?
Is your employment a result of your MS or PhD degree?
Who is/will be your employer?
What is/will be your job title?
Briefly describe your job descriptions

Rate how well the program enhanced your communication skills. (scale 1-10)
- Comment on how the program enhanced your communication skills or might be improved to achieve this objective.

Rate how well the program enhanced your abilities to conduct independent research? (scale 1-10).
- Comment on how the program enhanced your abilities to conduct independent research or might be improved to achieve this objective.

Rate how well the program fostered the attainment of knowledge of theories, methods, and findings in the social, behavioral administrative sciences in pharmacy on a scale from 1 (low) to 10 (high)
- Comment on how the program fostered this objective or might be improved to achieve this objective.

Rate how well the program prepares you to publish peer reviewed manuscripts? (scale 1-10)
- Comment on how the program prepares you or might be improved to achieve this objective.

Are there any areas that are not sufficiently covered in the MS or PhD program? If so, please identify any courses you would add to the program.

Comment on the academic advisement received from the Graduate Program Coordinator.

Comment on the academic advisement received from the thesis or dissertation advisor.

Comment on what you perceive as the strengths within the MS or PhD program.

Comment on aspects of the M.S. program that you believe should be changed.

Please feel free to add any other comments, criticisms, or suggestions that you believe would make Cameron's M.S. program more relevant and useful.

Findings
None. No student graduated last year.

How did you use findings for improvement?
N/A. No student graduated last year. This exit interview guide will be implemented starting in Fall 2014. Results will be reviewed annually at the Department's Graduate Program retreat in summer.

Additional Comments
Expected Outcome 2: Students will demonstrate a broad knowledge of basic principles of a specific discipline of pharmaceutical sciences
The Department of Health Outcomes and Policy has identified core domain and skills that graduate students enrolled in the Department should master including the area of specialization. The core domains and skills are taught in the required courses.

Assessment Method 1: Preliminary exam
Assessment Method Description
A preliminary exam is used to assess students' knowledge in core content and skills. Each committee member evaluates students’ exam performance using the Preliminary Exam rubric. This rubric evaluates students’ performance in the following domains:

- Integration of knowledge of social, behavioral and economic sciences (4 subjects areas are assessed)
- Knowledge of discipline-specific subject matter (in the area of student’s expertise)
- Ability to select appropriate research methods and statistical analysis for given scenarios
- Ability to synthesize information clearly

The response categories for each domain include: unacceptable, acceptable, very good and outstanding. Unacceptable in two domains (or more) OR unacceptable in two subjects (or more) will automatically result in “unacceptable” overall performance.
Evaluation by the Committee

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Unacceptable</th>
<th>Acceptable</th>
<th>Very good</th>
<th>Outstanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrates integrated knowledge of social, behavioral and economic</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>sciences</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Demonstrates knowledge of discipline-specific subject matter</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Demonstrates ability to select appropriate research methods and statistical</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>analysis for given scenarios</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrates ability to synthesize information clearly</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Unacceptable in two domains OR unacceptable in two subjects (or more) will automatically result in “unacceptable” overall performance

**Overall Performance:**

☐ Unacceptable – Describe remediation plan and new exam date

☐ Acceptable

☐ Very good

☐ Outstanding

**Committee Names and Signatures**

Name: _____________________________ Signature: ____________________________

Name: _____________________________ Signature: ____________________________

Name: _____________________________ Signature: ____________________________

Name: _____________________________ Signature: ____________________________

Name: _____________________________ Signature: ____________________________
Scoring Rubric

**Demonstrates integrated knowledge of social, behavioral and economic sciences**
- **Unacceptable** – Student demonstrates limited knowledge of materials related to social, behavioral and economics sciences in pharmacy; displays inadequate awareness of research literature.
- **Acceptable** – Student demonstrates advanced knowledge of materials consistent with graduate level training; displays an awareness of the research literature in pharmacy-related disciplines.
- **Very good** – Student demonstrates ability to apply fundamental concepts to topics in social, behavioral and economics sciences in pharmacy and ability to related the current literature.
- **Outstanding** – Student demonstrates ability to apply fundamental concepts to topics in social, behavioral and economics sciences in pharmacy, evidence of critical assessment and synthesis of elements of pharmacy-related disciplines is apparent.

**Demonstrates knowledge of discipline-specific subject matter**
- **Unacceptable** – Student demonstrates limited knowledge of materials related to the student’s research area and the knowledge of the research literature in the student’s research area is inadequate.
- **Acceptable** – Student demonstrates advanced knowledge of materials consistent with graduate level training, displays an awareness of the research literature in the student’s research area.
- **Very good** – Student demonstrates ability to apply fundamental concepts to topics in the student’s research area and has ability to relate the current literature.
- **Outstanding** – Student demonstrates ability to apply fundamental and advanced concepts to topics in the student’s research area and evidence of critical assessment and synthesis of elements of the literature in the student’s research area is apparent.

**Demonstrates ability to select appropriate research methods and statistical analyses for given scenarios**
- **Unacceptable**: Student identifies the method with little or no fit to the given scenarios or select the appropriate method but provides weak justifications for support.
- **Acceptable**: Student identifies the appropriate method and provides adequate justifications for support; student identifies most of the key limitations of the selected method.
- **Very good**: Student is able to identify the appropriate method and is able to justify as to why the method is appropriate; student identifies all of the key limitations of the selected method.
- **Outstanding**: Student identifies the appropriate method and is able to justify as to why the method is appropriate; student identifies all of the key limitations of the selected method and comes up with ways to improve the rigor of the selected method.

**Demonstrates ability to synthesis information creatively**
- **Unacceptable**: Confused presentation of information and evidence in support of answers.
- **Acceptable**: Organization of evidence and analysis is generally clear but may contain flaws.
- **Very good**: Organization of evidence and analysis reflects clear relationships of information supporting response.
- **Outstanding**: Organization of evidence and analysis is exceptionally clear in showing relationships of information supporting response including an indication of the relative importance of components of the evidence presented and a critical assessment/analysis of the validity if the information.

5
**Findings**
Three students took the exam in Summer 2013. One student had the overall unacceptable performance, one had the overall acceptable performance and one had the overall very good performance. All three students did not do well in one particular subject (behavioral theories). In particular, students had difficulty remembering specific variables of certain theories and had difficulty applying to a given scenario.

**How did you use findings for improvement?**
All graduate faculty met to discuss students' performance. One weakness was identified across all students. Next, graduate faculty who are responsible for teaching in that area met and discussed how to improve in this area.

Additionally, the rubric will be reviewed by all Department's graduate faculty on July 22. We will adopt the rubric and will utilize it starting in Fall 2014.

**Additional Comments**
We further evaluated the reason for why this was the case in terms of how the relevant course assessed students’ learning. Accordingly, the instructors of that course changed the way in which the assessment was carried from an open book to closed book exam. This change became effective in Spring 2014.

**Expected Outcome 3: Students will demonstrate acceptable scientific communication skills**
This particular outcome focuses on students' presentation skills.

**Assessment Method 1:** Assessing students' communication skills in seminar courses that are offered in Fall and Spring semesters

**Assessment Method Description**
We will use a rubric to evaluate communication skills. The rubric asks faculty members and graduate students in attendance to evaluate each student presentation in the following domains:

- Content (Scope and depth of knowledge, evidence of literature analysis and synthesis),
- Contribution to discipline (evidence of discovery, expansion upon previous research, and research significance)
- Quality of response to questions: (completeness of responses,
whether responses are supported by literature, and how responses are organized and delivered)

- Use of communication aids (communication aids’ contributions to the quality of the presentation and how information is presented)
- Use of allotted time (Whether the presenter utilizes the time efficiently)
- Presentation skills
- Overall quality

For each domain, response categories include do not meet expectations, meet expectations and exceed expectations.
Findings
Out of 9 students who attended and presented their work, one did not meet expectations, eight meet expectations and one exceeded expectations.

How did you use findings for improvement?
We realized that the student who did not meet the expectations did not
meet with the faculty advisor prior to the presentation. Also, some students did not allow sufficient time for faculty advisors to give feedback (for modifications) prior to the presentations. To improve this, we plan to require students to submit the topic to the course coordinator and their faculty advisor at least three weeks prior to their scheduled presentation and require approval from the faculty advisor at least one week prior to their presentation. We believe that doing so will enhance the quality of seminar presentations.

The rubric used to evaluate students' scientific communication skills will be reviewed by the Department's graduate faculty on July 22. The rubric will be administered online starting in Fall 2014.

Additional Comments

Expected Outcome 4: Students will provide evidence of being independent theory-based researcher

Assessment Method 1: Proposal and dissertation defense
Assessment Method Description
This rubric is used to evaluate proposal and dissertation defenses. Each faculty member evaluates student’s performance in proposal defense and dissertation defense using the rubric. This rubric assesses student’s performance in various domains including:
- Overall quality presentation
- Overall breadth of knowledge
- Quality of response to questions
- Use of communication aids
- Overall quality of science
- Contribution to discipline
- Quality of writing
- Overall Assessment

Response categories for each domain include do not meet expectations, meet expectations and exceed expectations.
Graduate Program
Health Outcomes Research and Policy Department
Harrison School of Pharmacy
Auburn University

Rubric #3
Evaluation of Proposal and Dissertation Defense

Student name: ___________________________
Dissertation title: ___________________________
Committee members
________________________________________
________________________________________
________________________________________

Circle one: Dissertation proposal Dissertation defense

At the conclusion of the exam/defense, each committee member should fill out the response sheet. For each attribute which a committee member feels is somewhat or very deficient, a short explanation should be provided. Completed forms are to be treated as confidential and are to be turned in to the Graduate Program Coordinator, not the student.

A summary of written comments from the committee members WILL be provided to the student by the chair of the examining committee.

All examination documents (rubrics and written comments) must be completed regardless of the outcome of the Proposal or Dissertation Defense. A copy of the completed forms (both rubrics and written comments) must be sent to the Graduate Program Coordinator within 48 hours of the conclusion of the proposal defense or dissertation defense.

Rubric - Completed by ___________________ Date: ___________________
(To be completed by each committee member. Please check boxes for all evaluation criteria that you feel are appropriate within each attribute category)

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Does Not Meet Expectations</th>
<th>Meets Expectations</th>
<th>Exceeds Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall quality presentation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Attribute not applicable</td>
<td>□ Poorly organized</td>
<td>□ Clearly organized</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Poor presentation</td>
<td>□ Clear presentation</td>
<td></td>
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<tr>
<td></td>
<td>□ Poor communication skills</td>
<td>□ Good communication skills</td>
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</tr>
<tr>
<td></td>
<td>□ Slides and handouts difficult to read</td>
<td>□ Slides and handouts clear</td>
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<tr>
<td>Overall breadth of knowledge</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>□ Attribute not applicable</td>
<td>□ Presentation unacceptable</td>
<td>□ Presentation acceptable</td>
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<tr>
<td></td>
<td>□ Presentation reveals critical weaknesses in depth of knowledge in subject matter</td>
<td>□ Presentation reveals some depth of knowledge in subject matter</td>
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<tr>
<td></td>
<td>□ Presentation does not reflect well developed critical thinking skills</td>
<td>□ Presentation reveals above average critical thinking skills</td>
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<tr>
<td></td>
<td>□ Presentation is narrow in scope</td>
<td>□ Presentation reveals the ability to draw from knowledge in several disciplines</td>
<td></td>
</tr>
<tr>
<td>Quality of response to questions</td>
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<td></td>
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</tr>
<tr>
<td>□ Attribute not applicable</td>
<td>□ Responses are incomplete</td>
<td>□ Responses are complete</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Arguments are poorly presented</td>
<td>□ Arguments are well organized</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Respondent exhibits lack of knowledge in subject area</td>
<td>□ Respondent exhibits adequate knowledge in subject area</td>
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<tr>
<td></td>
<td>□ Responses do not meet level expected of a Ph.D. graduate</td>
<td>□ Responses meet level expected of a Ph.D. graduate</td>
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<tr>
<td>Use of communication aids</td>
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</tr>
<tr>
<td>□ Attribute not applicable</td>
<td>□ Communication aids are poorly prepared</td>
<td>□ Communication aids contribute to the quality of the presentation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Too much information included</td>
<td>□ Appropriate information is included</td>
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<tr>
<td></td>
<td>□ Listeners are confused</td>
<td>□ Listeners can easily follow the presentation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Communication aids are used inappropriately</td>
<td>□ Some material is not supported by communication aids</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>□ Communication aids enhance the presentation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Details are summarized so major points stand out</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Information is organized to maximize audience understanding</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Reliance on communication aids is minimal</td>
<td></td>
</tr>
</tbody>
</table>
Findings
In Summer 2013-Spring 2014, only one student defended her dissertation proposal and she successfully passed the defense (overall exceed expectations).

How did you use findings for improvement?
- We found that having a clinician on the dissertation committee is very helpful and we will continue to seek and develop future collaborations with clinicians.

- The rubric will be reviewed by the Department's graduate faculty on July 22. The rubric will be adopted and utilized starting in Fall 2014.

Additional Comments

Students will publish peer reviewed manuscripts
The Department is keeping records of students' participation in peer reviewed manuscripts.

Assessment Method 1: Analysis of publication records
Assessment Method Description
Only published articles are reported within a given time frame.
**Findings**
The Department is a relatively small department. It has 9 PhD students. Of these, 4 are new students and none of them have any publications. Between June 2013 to Spring 2014, there are 9 publications that students were either lead or co-authors in peer-reviewed publications.

**How did you use findings for improvement?**
The Department is satisfied with the number of publications that students are involved in. Of the 9 publications, 5 were led by the graduate students (and derived from their thesis/dissertation) and 4 were led by faculty members but have students participating in writing the manuscripts.

The Department will continue to involve students in different projects and offer opportunities for students to be part of the project teams. Also, certain class assignments also have the potential to generate publishable manuscripts.