Fostering Grant Writing Skills: A Student Learning Objective (SLO) of the Intercollege Nutrition PhD Program

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Introduction
The mission of the Intercollege Nutrition PhD Program is to prepare individuals to function as independent nutrition researchers who can take an interdisciplinary approach to nutrition issues. The goal of the program is to graduate students prepared for careers as university educators, research scientists, or specialized professionals within the field of nutrition. One particular skill that translates across multiple professions in the nutrition field is grant writing. The faculty in the Intercollege Nutrition PhD Program applied an assessment evaluation process to ensure the program was adequately preparing students’ grant writing skills, a stated program learning outcome.

Program Facts
- Number of faculty
  - Regular = 15
  - Cooperating = 14
  - Affiliate = 2
- Number of students (2015-2016) = 4
- Number of graduates = 2015 = 3
- Provisional Status (BOR approved 2007)

Program Outcomes
Students in the Intercollege Nutrition PhD Program will be expected to demonstrate:
1. Comprehensive understanding of core nutrition knowledge
2. Advanced scholarship in a specialty area
3. Appropriate exposure to social and career-building disciplines
4. Develop skills in research methodologies demonstrated by conducting original scholarly research
5. Develop skills in grant writing
6. Understanding of research ethics
7. Effectively disseminate research findings via peer-reviewed publications, seminars and practical applications such as teaching

Program Curriculum Map for SLO 5 Grant Writing Pre & Post Assessment

<table>
<thead>
<tr>
<th>Requirement (Pre)</th>
<th>SLO 5</th>
<th>Requirement (Post)</th>
<th>SLO 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 cr of nutrition</td>
<td>10 cr of nutrition, 6 cr of research methodology</td>
<td>6 cr of research methodology</td>
<td>4 cr electives</td>
</tr>
<tr>
<td>12 cr of directed reading</td>
<td>12 cr of directed reading, 6 cr of career building</td>
<td>12 cr of directed reading</td>
<td>R</td>
</tr>
<tr>
<td>Qualifying Exam</td>
<td>Qualifying Exam</td>
<td>Qualifying Exam</td>
<td>Qualifying Exam</td>
</tr>
<tr>
<td>10 cr of specialty courses</td>
<td>10 cr of specialty courses</td>
<td>10 cr of specialty courses</td>
<td>R</td>
</tr>
<tr>
<td>6 cr of career building</td>
<td>6 cr of career building (1 cr from FSHN 657)</td>
<td>6 cr of career building</td>
<td>X</td>
</tr>
<tr>
<td>Teaching</td>
<td>Teaching</td>
<td>Teaching</td>
<td>Teaching</td>
</tr>
<tr>
<td>Comprehensive Exam &amp; Dissertation Proposal</td>
<td>Comprehensive Exam &amp; Mock Grant Proposal</td>
<td>M, A</td>
<td>M, A</td>
</tr>
<tr>
<td>Dissertation</td>
<td>Dissertation</td>
<td>Dissertation</td>
<td>Dissertation</td>
</tr>
</tbody>
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I = Introduction, R = Reinforcement, M = Mastery, A = Assessment, FSHN = Food Science and Human Nutrition

Collaborative Process Used to Improve SLO 5

1. Program Assessment Coordinator (PAC) reviewed curriculum map and identified that SLO 5 needed improvement
2. Meeting held with Executive Committee and full faculty to discuss potential opportunities for improvement
3. PAC sought advisement from other Assessment Coordinators on campus
4. PAC revised curriculum map based on suggestions from Executive Committee, faculty, and outside Assessment Coordinators
5. Revised curriculum map shared at meeting with Executive Committee and full faculty for preliminary approval
6. Voting to approve revised curriculum map completed online

Action Plan
1. Edit curriculum map to reflect IRMA
2. Identify a course that would introduce grant writing skills (FSHN 657: Grant Writing for Graduate Students)
3. Identify an opportunity for reinforcement (Working with advisor in FSHN 699: Directed Reading)
4. Identify an opportunity for students to demonstrate mastery (Comprehensive Exam & Dissertation Proposal)
5. Identify a grant format that would work best for nutrition students (USDA Pre-doctoral Grant)
6. Modify Comprehensive Exam & Dissertation Proposal Rubric to allow for assessment of writing skills

Conclusions
The modification to the curriculum to better address SLO 5 grant writing will improve the program and student experience. The program will be able to better assess meeting of SLO 5. While students will get valuable feedback on their dissertation through the grant proposal and have an opportunity to apply for dissertation funding, an experience that can be documented on the curriculum vitae. The impact of this change will be monitored over time.