Development of a Managerial Mentoring Program for Underrepresented Animal Science Students

Jeff S. Pendergraft  PhD, PAS, Dipl. of ACAS
Department of Animal Science

Sul Ross State University
Alpine, TX
Situation in West Texas

• Service area:
  – 19 counties
  – 158,000 residents
  – 64% are Hispanic
  – 31.5% live in poverty
  – 1 in 30 Hispanics have a bachelor’s degree
The Hispanic-Serving Institutions Education Grant Program

Project Objectives

1. Acquire updated instrumentation and laboratory equipment
2. Develop curricula that increase interactions between students and faculty outside of traditional lecture courses.
3. Use alternative and innovative teaching methods that reach and motivate students
4. Create a realistic workplace experience for the development of valuable real-life skills.
5. Develop a managerial mentoring program
The Approach

• Designed three new courses
  – ANSC 2204 & 2205  Stable Management I & II
  – ANSC 4312  Inquiry into Equine Science

• Purchased equipment for the new labs.
The Managerial Mentoring Model

• **Program:** Equine Science
  – Areas of emphasis within the program:
    • Management
    • Nutrition
    • Reproduction
    • Exercise Physiology
    • Behavioral Modification
The Initial Managerial Mentoring Flow Chart
Becoming a Mentor

- Trial & Error
  - Standard requirements
    - Classes
    - GPA
    - Work quality
    - Resume
    - Interview
    - Experience
Products

- 3 laboratories were modernized by equipping them with state-of-the-art instrumentation, laboratory, and media equipment;
Products

• 10 stipends and 1 fellowship was awarded;
• 50 professional web pages were created;
• 12 cities were visited for recruiting;
• 5 abstracts were published;
• 16 presentations were given
Products

• Six research and two teaching projects were conducted
• Six of the eight projects were conducted by Hispanic students
The Managerial Mentoring Program
Outcomes

• Newly developed and restructured courses:
  – total enrollment of 646 participants
  – representing 239 students
  – 54 of these individuals were underrepresented animal science students.

• Ten out of the thirteen animal science courses that were used for the project observed a 50 % increase in underrepresented student
## Outcomes

Mean grade point average from new and restructured courses.

<table>
<thead>
<tr>
<th></th>
<th>Mentoring Program</th>
<th>None Mentored</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>2.89</td>
<td>2.12</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2.80</td>
<td>1.77</td>
</tr>
<tr>
<td>African - Americans</td>
<td>3.00</td>
<td>2.00</td>
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<tr>
<td>Average</td>
<td>2.88</td>
<td>2.08</td>
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</table>
Outcomes

• The managerial mentoring program had 70 students participate
• 22 were minority students
• 17 students became mentors
• 6 mentors were Hispanic
Impact

• Underrepresented animal science student participation during this four year project increased 70.6 percent.
• 2 Hispanic students participated in the McNair Scholar Program
• 23 students graduated during this project and 18 of them participated in the mentoring program
• 16 students currently work in the Ag industry
Student Centered Program

- Program is student ran
- Program activities
  - Short Courses
  - Educational Clinics
  - Research projects
  - Grant projects
  - Campus activities
  - Recruitment
  - International
  - Cost Efficiency Model
Future Initiatives
Leadership is action not position.

The Hispanic-Serving Institutions
Education Grant Program