The SEEDS of Success: 
Creating Pathways to USDA-Related Careers

Dr. Waverly C. Ray, SEEDS Co-Coordinator, San Diego Mesa College, California

ABSTRACT

The “SEEDS” (STEM Engagement for the Enrichment of Diverse Students) Scholars Program is designed to increase the number of Hispanic students pursuing future graduate degrees by providing a firm foundation of advanced knowledge and skills in STEM-related fields, beginning in the first two years of college. The SEEDS Scholars Program at San Diego Mesa College—an HSI-designated community college—is primarily funded by the U.S. Department of Agriculture's National Institute of Food and Agriculture through a four-year HSI grant. The overarching objective of the SEEDS Scholars Program is to create a school-to-career pipeline in the STEM fields so that underrepresented students are prepared for careers in the SEEDS themes of sustainability, food security, and hunger. This requires relationship-building among numerous stakeholders including a) faculty, support staff, and administrators on the Mesa College campus; b) industry professionals; c) K-12 teachers, counselors, administrators, and parents; and d) university professors and special programs staff.

In addition to supporting the academic, professional, and personal growth of sixty SEEDS Scholars, the program incorporates innovative learning opportunities open to all Mesa College students. This includes experiential learning opportunities on local farms, an on-campus Sustainability Summit, and environmentally-related volunteering opportunities. To date, more than 800 students and 133 educators have participated in SEEDS activities.

INTRODUCTION

In its third and penultimate year, the SEEDS Scholars Program at San Diego Mesa College is working to achieve its objectives while institutionalizing successful practices identified in its annual internal and external evaluations. The overarching objective of the SEEDS Scholars Program is to create a school-to-career pipeline in the STEM fields so that underrepresented students are prepared for careers in the SEEDS themes of sustainability, food security, and hunger. This requires relationship-building among numerous stakeholders including a) faculty, support staff, and administrators on the Mesa College campus; b) industry professionals; c) K-12 teachers, counselors, administrators, and parents; and d) university professors and special programs staff.

The table below links the SEEDS Scholars Program’s objectives to the goals of the USDA’s Hispanic-Serving Institutions Education Grants Program.

<table>
<thead>
<tr>
<th>USDA-HSI Goals</th>
<th>SEEDS Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attract and support undergraduate and graduate students from underrepresented groups to prepare them for careers related to food, agricultural, and natural resource systems of the United States.</td>
<td>1a. Develop and implement outreach strategies to three San Diego high schools with strong Hispanic enrollment to raise awareness and identify ways to mitigate the issues of global food security and hunger through sustainable agriculture and environmentally-friendly systems while exposing students to educational pathways and possible careers in this area.</td>
</tr>
<tr>
<td>2. Enhance the quality of postsecondary instruction within these disciplines.</td>
<td>1b. Provide a support system of peer navigators, faculty mentoring, intrusive advising and counseling for underrepresented students to stay on track to complete STEM degrees.</td>
</tr>
<tr>
<td>3. Provide opportunities and access to food and agriculture careers in the civil service.</td>
<td>2. Provide food security, hunger, sustainable agriculture, and STEM related courses and experiential opportunities for students.</td>
</tr>
<tr>
<td>4. Align the efforts of HSIs and other nonprofit organizations in support of the academic development and career attainment of underrepresented groups.</td>
<td>3. Provide exposure and connections to industry, USDA, and university faculty in the food sciences, sustainable agriculture and STEM fields.</td>
</tr>
<tr>
<td>5. Support systems for sixty SEEDS Scholars, the program incorporates innovative learning opportunities open to all Mesa College students. This includes experiential learning opportunities on local farms, an on-campus Sustainability Summit, and environmentally-related volunteering opportunities. To date, more than 800 students and 133 educators have participated in SEEDS activities.</td>
<td>4. Collaborate with elementary, middle and high schools, four-year institutions and other nonprofit groups to create a pipeline of students majoring in STEM fields addressing food security, hunger and sustainable agriculture.</td>
</tr>
</tbody>
</table>

HIGHLIGHTS

The photographs below highlight some of the activities of the SEEDS Scholars Program, which include:
- Visits to SDSU and UCSD research labs,
- Awarding first-generation college student Jessica Vallejo a $40,000 fellowship to support her undergraduate education,
- Hosting a Sustainability Summit for high school and college students,
- Attendance at the HACU Annual Conference, and
- Conservation education with local elementary students.

Contact

Waverly C. Ray, Ph.D.
SEEDS Co-Coordinator
Assistant Professor, Geography
San Diego Mesa College
wray@sdccd.edu
(619) 388-2408